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When the Program with Developing Institutions was funded for a second year, it was decided to hold a national conference at Vincennes University, plus subsequent regional meetings, on the new faculty development program. It was to stress change in relation to faculty development and improved instruction, with a chance for small-group discussions. Main addresses were on reasons for change, process of affecting change, innovative colleges, challenge of educational technology, change in a small private college, USOE and developing colleges, plea for starting over, students as change agents, new communication potentials for junior colleges, comparative guidance and placement as a change tool, general and technical education, and time for a change. Panels discussed the change process, catalysts of change, how students are turned on, and education for whom. Major ideas from the small-group discussions were the use of interaction analysis, role playing, and sensitivity training; use of tapes to aid in evaluation; more use of students as tutors, counselors, etc.; faculty workshops in using visual aids; limited class size for developmental courses; released time for innovation; constant appraisal and revision of teaching methods; interdepartmental cooperation in remedial programs; compensatory programs for the deprived; peer-group interaction to turn students on; student participation in all phases of college life; turned on faculty to produce turned on students; change as a function of student needs. (HH)

EDO 32877

STRATEGY FOR CHANGE

IN THE JUNIOR COLLEGE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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American Association of Junior Colleges
Program With Developing Institutions

Selected Proceedings
of the
Second National Conference
Vincennes University
Vincennes, Indiana
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INTRODUCTION

The initial year of the AAJC Program With Developing Institutions was launched by a national conference on Planning for Development at Airlie House, Virignia, in June, 1968. The conference was highly rated by those attending; it laid the groundwork for the year of planning, bringing the college representatives and consultants together for preliminary consultation and bringing into sharp focus the issues and tasks of the year to come.

When the Program was funded for a second year, there was serious discussion as to whether a second national meeting should be called to launch the new program on Faculty Development. A consensus was finally reached with the National Advisory Committee and regional coordinators: regional meetings would be emphasized, but there was still need for a national conference to set the tone of the second year's program, to bring college deans and faculty together with consultants, and to bring some of the best thinking about change and innovation in curriculum and instruction to both groups.

There were three major changes in the conference plan, however, as compared with the previous year:

(1) The conference was held on an outstanding junior college campus--that of a college which was and is a participant in the program: Vincennes University, Indiana. This was done despite some inconvenience for travelers, in order to provide a more central location, a realistic atmosphere for the meetings and a living demonstration of the ways in which one developing college was solving its problems.

(2) In place of the more diffuse program at the Airlie Conference, it was decided to focus attention more sharply on one thing: the process and content of change in relation to faculty development and improvement of instruction at the junior college level. The entire conference was planned around this theme, as will be apparent in this monograph.

(3) Small-group discussion of a relatively unstructured sort was built into the program following each general session, so the college representatives could freely exchange experiences in relation to the topic at hand. The discussion sessions were well attended. This programming packed the time schedule rather tightly, leading to some complaints about lack of free time; but there was general agreement at the end of the conference that the small-group discussions had been most worthwhile.

All general sessions were recorded and copies of formal presentations obtained, with a view to publishing selected portions of the Vincennes conference proceedings in this little volume. It was impossible to include a detailed account of the small discussion sessions, but the most frequent conclusions reached therein are included. We have tried to produce a monograph that will be useful as a stimulator and a reference during the year of the faculty development project.

Special thanks go to Dr. Isaac Beckes, President of Vincennes University and chairman of the national conference, for his leadership and hospitality in making arrangements; and to members of the staff of the Program With Developing Institutions and especially to Brent Smith, Helen Minifie, Lee Ann Focer and Doris Stubblefield for helping to prepare the manuscript for publication.

The Program With Developing Institutions is administered by the American Association of Junior Colleges, and financed by funds from grants to colleges under Title III of the Higher Education Act of 1965, administered by the Division of College Support, U.S. Office of Education, Department of Health, Education, and Welfare.

Selden Menefee
Program Director

September 15, 1969

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C H A N G E - - F O R W H A T ?

William G. Shannon, Associate Executive Director
American Association of Junior Colleges

Having reviewed the schedule of this conference, I can say in all honesty that the association has probably never before co-sponsored a program that is so filled with star players. The speakers represent a great expertise in many fields and I think it is one of the unusual opportunities you will have this year to have so many of these people in a conference of this type.

I want to indicate that we are delighted to be part of this entire program, operating under the U.S. Office of Education and Title III of the Higher Education Act. The program is part of an overall strategy and is leading, we hope, to change in the various colleges associated together in this project. The purpose of the whole Title III program, as you may know, is to increase and enhance the quality of education in our respective institutions. Somewhere along the line, we have to ask the question, "What are we really trying to do?" Much of the conference, as you will see, is related to the mechanics of producing change; how to involve educational television, how to bring in modern technology and how to utilize consultants.

This is not to say that we have not given attention to the overall objectives and goals, but I think somewhere we have to keep in mind the question, "What's it all about?" And then, "What are we really trying to do? How do we really change an institution? How do we measure the change? How will we know, if after this conference or after the Title III project is all over, whether we've been successful or not?" We haven't given much attention to evaluations of our own efforts, of our own work, or of our own discussions. By next year's graduation, will we have helped any student to become a better reader or better writer or a better listener? Will the students we have in our institutions now be better parents, better citizens or better wage earners in a few years because of this conference or the other programs within the Title III program? How will we measure success? How are we going to determine whether or not we have really reached people with significant change, not just change for change itself? Now, I submit that these are some of the questions that many of the speakers will have in mind as they address you. And when you have your discussions, I'm sure you'll have these questions in mind. I think that unless we consciously concentrate on these types of questions, we can be wrapped up in mechanics and not pay enough attention to the overall objectives of the Title III project and our institutions. It's a very easy device to grab hold of--this concentration on mechanics and the involvement of individuals in discussions without addressing ourselves to the overall basic questions of what it is all about. Why are we here together? How are we going to judge the quality of instruction and the quality of our institutions? And then how do we package the various ideas we will be talking about here into an on-going institutional device or mechanism?

Change is not something we want to concentrate on. The purpose of the Title III program is to develop lasting methods for changing, for synthesizing ideas, for pulling ideas together relating to whatever we happen to be doing in the institution, so that ultimately we don't have to consciously say, "This is bad. This is not so good. We'd better go out and change it." How do you build in self-evaluation, self-correcting devices, self-correcting approaches or self-improvement?

I would suggest that when you are discussing with the consultants how you could improve your own institutions, that you pay attention to the long-range possibilities that lie within the educational field. And I think that you will sense in what students are talking about, screaming about today, that somehow or other, educational institutions have not latched on to the idea of self-improvement on a continuing basis. Perhaps, in some cases they held conferences or operated programs on a national scale or regional scale or perhaps on individual campuses, or corrected certain abuses or practices. But then, what have we done to build into our faculty orientation program and our orientation for new board members the concept of change as a necessity, the concept of change--desirable change--as being an essential for maintaining quality in education? And how do we counteract the cynicism that develops when you approach a person and say, "Don't you think there ought to be some changes in our work? What can we do to bring about change?" And often, too often, people feel--"Well, I just can't be bothered now. Things are going pretty well, aren't they? Perhaps I'll just continue for another year and maybe next year if I get that leave, I'll correct that curriculum, change that syllabus, change our administrative tactics." Perhaps. And the cynicism begins to set in and this is what our students are shouting about. And they are sensing this lack of initiative, lack of desire, lack or ability to change, and they are screaming about it justifiably.

We shouldn't let cynicism stand in the way of improvement or our own direction. It is easy to fall into the trap of cynics and resist change and improvement. But then again, how do we judge when we should move? I hope that in the discussions here we'll come to grips with that question. When can we move, in what direction and for what purpose? With the help of consultants visiting your campuses, you will be able to work these things out, and we will be waiting for the reports and evaluations of the success of this conference and the entire program.

But again, I would like to suggest that we keep in mind the bigger question, "What's it all about?" For whom are we doing all this? For whom is the money really being expended in the final analysis? And what is the spirit of the change that we wish to bring about? And I thought that rather than give you my own closing words, I would like to read a poem that Carl Sandburg wrote, not too far from this territory, quite a few years ago, when I think he captured this idea of something a little beyond where people are at their current stage. The poem is from his book, Good Morning America, and is entitled "Let Them Ask Your Pardon"

He wrote:

Child, what can those old men bring you?
If they can bring you a new handful
Absolutely warm and soft as summer rain,
Let them ask your pardon and do it soon.
Otherwise, why are they old?
Otherwise, why should they look at you
And carry assumptions in their old eyes?
And speak such words as "ignorance"
And "wisdom"- Let them ask your pardon
Showing you how summer rain is an old pal
Of the wriggle of the angleworm,
The flip of the muskalonge,
And the step of the walking rain
Across the prairie.
If the old men, child,
Tell you no stroies about rockets,
Shooting stars, horses on high ranges,
Let them ask your pardon, excuse themselves and go away.

* * *

THE PROCESS OF EFFECTING CHANGE

William A. McClelland, Associate Director
Human Resources Research Office
The George Washington University

What could be more appropriate than a discussion of the change process with an audience representing the most vital evidence of change in higher education today, the American Junior College! Of course, as Dr. Gleazer wrote recently in American Education, the average two year college has not been in existence for much more than eight years. One might ask, therefore, "Why worry about the process of effecting change? Most of us have barely gotten established!"

Well, nobody would have come to this conference if he hadn't been firmly convinced that current college policies, procedures and practices can be improved. And improvement usually means change.

I am personally delighted to be with you to discuss some of my own thoughts on "The Process of Effecting Change." My interest in change stems from my experience in applied behavioral science research and development, and attempts to facilitate adoption and use of the products of these efforts. All of us here today want the two year college experience to be meaningful, satisfying and useful to the students. To accomplish such broad goals we must be concerned generally with the process of effecting change and specifically with practical strategies.

What do we know about the change process? What are some of its salient characteristics? Examination of the literature on change and innovation quickly reveals that many disciplines, many professions and many public and private agencies are vitally concerned with this topic. Aspects of change have been studied by rural sociologists, management and industrial engineers, educators, and all manner of psychologists. The word "innovation" enjoys as great popularity today as did the word "systems" ten years ago!

But what do we know about change? Why are some innovations adopted while others are not? How does one really move from research to development to application and use? What accounts for the differential successes of individual change agents and applied R&D organizations? How can an innovation, once implanted, be sustained?

BACKGROUND AND DEFINITIONS

Cultural anthropologists have been interested in the change process for perhaps longer than any other discipline. A few educators were examining the rates of diffusion of new ideas thirty years ago. Rural sociologists, who have had a continuing interest in innovation research since the 1920's, pioneered in the quantitative study of the diffusion process. Since World War II, a variety of people working in industry (economists, historians, engineers, and psychologists) have actively pursued studies in the area.

While the individual scientists and practitioners may not yet speak each other's language with confidence, nevertheless, diffusion researchers seem to understand one another. And, the literature on diffusion has grown from a mere handful of studies completed prior to 1940 to over 1100 by 1967.

Before proceeding further let me define a few of the terms I have been using and will continue to use.

Innovation - a deliberate, novel, or specific change which is thought to be efficacious in accomplishing the goals of a system.

Change Agent - a professional person who attempts to influence or does influence adoption decisions in a direction he feels is desirable.

Diffusion - the acceptance over time of some specific item (idea or practice) by individuals or groups or other adopting units linked by specific channels of communication to a social structure and to a given system of values or culture.

In education, the classic studies of Mort and Cornell published in 1941 indicated that it took about 50 years for complete diffusion of such practical inventions as the kindergarden to take place. More than 15 years elapsed before 3% of the nation's schools adopted kindergardens. Travers reports the same kind of lag at the turn of the century in the adoption of ideas proposed by Rice, a physician turned educator. Miles, however, feels diffusion has been much more rapid in the 1960's than in the 1930's.

In agriculture individual farmers took about fifteen years to adopt a new hybrid corn. Findings from Project HINDSIGHT and an Air Force Office of Scientific Research study suggest that a five to ten-year period is typical of the lag in the use of a scientific or technological finding or event.

A study of adoption (i.e. prescription) of a new drug by physicians indicated two years were required for more or less complete diffusion. While HumRRO experience with Army utilization of R&D has not been studied formally, the range of time from completion of research to implementation or use of the information has ranged from a few weeks to over ten years.

Clearly, adoption rates have varied over time, among contexts and from discipline to discipline. The safest generalization, i.e. "Diffusion takes time," is not very helpful. A great number of different variables must be examined, and it is to such a summary examination I now turn.

WHAT DO WE KNOW ABOUT CHANGE?

What do we know about change? What can we learn from change studies conducted by anthropologists, educators, engineers, psychologists, and sociologists? At a minimum we may find some of the concepts, tools, and procedures worthy of further study, test and application.

1. Types of change

Students of the change process speak of three types of change: imitation, selective contact change, and directed contact change. My concern, however, is with directed contact change or planned change, that is a deliberate and colloborative process involving an agent of change and a client system. Change can come solely from within the system, but the contemporary national and international scene is clearly preoccupied with directed or planned change.

Our knowledge of planned change is a blend of experience and intuition, with a large dash of folklore, to which there is slowly being added a body of scientific literature. Most diffusion research is not hard science; it clearly belongs in the domain of social science. For innovation of any kind is a social-behavioral phenomenon.

The process of change as practiced is still pretty much of an art form. Nevertheless, in comparison with our knowledge 25 years ago, Rogers says, "Today...we understand a great deal more about the way in which new ideas diffuse among such varied audiences as physicians, Colombian peasants, suburban housewives, industrial plant managers, and Australian aborigines."

Still, a number of simple, unlikely propositions about planned change have evolved on which comment is necessary. Proposition #1: A good product will succeed on its own merits. Or stated differently, "Information is sufficient for change." In other words, a solid research report which contains clear action implications is all that is needed. It will convince the client system of the wisdom of adopting the stated or implied action.

Don't you believe it! No more picturesque case history evidence for this fallacy exists than the following quotation from Morison concerning the effects of certain reports submitted half a century ago to the USN Bureau of Ordnance and Bureau of Navigation on a new technique of naval gunnery.

> "The reports were simply filed away and forgotten. Some indeed, it was later discovered to"..(their author's).." delight, were half eaten away by cockroaches."

There are several pessimistic signs on the contemporary national scene based on the workings of sophisticated information dissemination processes. Carter summarizes the conclusions of a study of the NASA dissemination program to the effect that few if any commercial firms are vigorously seeking directly to use the technical and scientific output of NASA, or the other advanced technology developments supported by the government. The most acid comment, however, is probably Havelock's:

> "The technology information program undertaken by the National Aeronautics and Space Administration has been very well financed and elegantly organized, but, so far evaluation studies" (note: there have been at least three) "lead to one conclusion: pitiful. In medicine, the government has been less ambitious so far, but the funds expended on such projects as the National Library of Medicine's automated information retrieval system (MEDLARS) have not been clearly justified."

Proposition #2: <u>The introduction of an innovation is a final act, and no further attention is required</u>. Not so. Obviously, a plan for maintenance and feedback <u>is</u> essential if the planned change is to persist. Training aids and devices are today gathering dust in storerooms throughout the country. Teachers and managers have reverted to their former practices. The re-appearance of old individual and organizational patterns of behavior testify to the reality of regression from innovative change. Speaking metaphorically, money, time and continuous effort are required if the flowers and shurbs planted in American's beautification program are to survive.

Proposition #3: <u>There is an orderly process from research to development to use</u>. First the scientist discovers and then verifies a fact or a principle about natural phenemona, perhaps defining the relationship among a set of variables. Then the technologist develops ways to use this information in order to get things done. Finally the development is put to use. So goes the proposition.

But we know there is a great deal of crossing back and forth among research, development and use.

2. <u>Elements in a diffusion of innovation</u>

Rogers has identified four key elements in diffusion which bear scrutiny, namely: (1) the innovation itself, (2) communication, (3) the social system, and (4) time. A brief look at each may help to provide structure for understanding the process of effecting change.

The nature of the innovation will be discussed more fully in the next section. Communication is defined by Rogers as the transfer of ideas from source to receiver. Some innovations are more visible than others and therefore diffuse more rapidly.

A third key element in diffusion is the social system that is a "group of individuals (or units) who are engaged in collective problem solving around a common goal or output."

Time is the fourth key element. It takes time for the client to travel the majestic route from awareness of the innovation, to the arousal of interest, to an evaluation of the idea, through an actual trial to arrive finally at adoption or rejection. In terms which are perhaps more comfortable to psychologists, the decision process involves acquisition of knowledge, attitude formation and change, the rendering of a decision and data gathering to confirm it.

3. Factors inhibiting or accelerating change

Much has been written on the factors which inhibit (or accelerate) change, and the work is very uneven in quality. It extends from speculation to controlled experimentation. The contexts studied range from villagers in agrarian societies to retail drug salesmen, from Iowa farmers to school administrators, from business managers to Defense Department managers, and from individuals to organizations. Generalizations from such a diverse literature can therefore be characterized only as suggestive or, more generously, as the raw materials for the formation of hypotheses for test.

Rogers' Views - A General Perspective

One widely quoted set of characteristics of innovations which affect the rate of adoption has been offered by E.M. Rogers in the Educational Record for Winter, 1968:

(1) Relative advantage, that is, the degree to which an is perceived as better than that which it supercedes. Relative advantage can be expressed in such terms as economics, prestige, or convenience to the client.

(2) Compatibility, or the degree to which an innovation is consistent with the existing values and past experiences of the client.

(3) Divisibility is the degree to which an innovation may be adopted on a limited basis. For example, a divisible educational innovation could be adopted by part of a school system, or by one department in a college. In contrast to a stage-by-stage adoption, an all-or-none adoption would not have the characteristic of divisibility.

These first three are favorable to change.

(4) Complexity, or the degree to which an innovation is relatively difficult to understand and use, inhibits change. The resistance that school teachers manifested some years ago toward the use of motion picture projectors is a simple example of complexity.

Niehoff's Analysis of Cultural Factors

Niehoff, a cultural anthropologist who has analyzed a carefully selected sample of several hundred case histories of cross-cultural change projects in agrarian societies, offers a much more specific listing. He concludes that transfer of an innovation is easiest, most likely to be successful, if:

- Innovations are selected which tend to be compatible with the cultural patterns of the recipient group. This means that the amount of new behavior which must be accepted and the amount of old behavior which must be given up will be minimal.

- Innovations are selected which will meet existing or felt needs of the recipients, preferably those which they have tried to solve through their own efforts.

- Innovations are selected which will provide practical benefits in this world as perceived by the recipients, usually by improving their economic position.

- The strategy of introduction will involve adapting to and working through the local cultural patterns, particularly the pattern of local leadership.

- Channels of communication are established by the change agent which provide an efficient two-way flow of information. Especially vital will be feedback channels from the recipients to the change agent.

- The recipients are involved in the introduction process through full participation. Of most significance will be their contribution of planning, material goods, time, or labor.

- The change agent is flexible in his strategies, altering them to meet unforeseen circumstances.

- The change agent establishes patterns of maintenance among the recipients so that the innovations can be continued when his influence is withdrawn.

Problems in Educational Change

What is the situation in the field of education? Educators and scientists who have studied school systems would probably agree that the following list of factors inhibit diffusion:

The diffuseness of the goals of education. The goals of education are multiple, especially those having to do with socialization of the students. Rare indeed are good instructional objectives stated in terms of the behavior which is to be attained through the educational process.

- Lack of an established "engineering function" in the education system. Teacher education programs do not develop the needed skills and knowledge to engineer innovations nor have teachers developed the necessary habits of scholarship. Hopefully, the Title III centers and the Title IV regional educational laboratories created by the Elementary and Secondary Education Act of 1965 will help to correct this lack.

- Lack of evaluation and feedback. This follows quite naturally from a lack of precise goals. How can the effects of an innovation possibly be assessed if it is unclear as to what objective the change is relevant?

- Attitudes of reticence, suspicion and fear on the part of educators. The school system is highly vulnerable to a great variety of powerful influences in its environment such as parents, school boards and power elites in the community. The situation breeds conservatism, and the reticence of the school administrator in advocating change is not surprising. Even his colleagues and staff may resist. Such a state is not conducive to full communication and a creative working relationship designed to produce change. Further, the innovation may not be compatible with the existing values and past experience.

- Management problems and funding problems. Both of these factors inhibit the diffusion of innovation. An innovation which is complex and not divisible is much more likely to be costly than one which is simple and divisible.
- Finally, the educational bureaucracy itself is a source of resistance to change.

Surveying the above listing one might feel very pessimistic about change in education. Yet, according to the architects of planned educational change the sources of resistance are amenable to study and to modification.

4. Levels of change

Chin has drawn a useful distinction among levels of change which could also be viewed as differing definitions of change. He has identified five such levels which appear to occupy different points on a continuum of amount or degree of changing the structure of the client system. This concept of level of change is definitely related to the factors inhibiting innovation, since the scale seems to range from the easiest to the hardest to accomplish.

- Substitution of one insulated segment for another is the first and simplest form of change. For example, adoption of a new work book for the same text is likely to have little or no additional system effects.

- Alteration may involve a minor change but one which can have unforeseen systemic effects. For example, what if the new workbook requires additional laboratory space and equipment with which the teacher is unfamiliar?

- Sometimes a third level of change occurs, involving perturbations and variations in the client system.

- Restructuring is the fourth level of change, and it represents fundamental change in the structure of the system. Chin states, "Change of this order is basic social change." The adoption of a new elementary school mathematics curriculum is a familiar example.

- Finally, and most complex of all, is value orientation change. The contemporary wisdom of the observations DeTocqueville made about American society more than 100 years ago suggests how slow is the change in our national character.

5. Characteristics of innovators

In planning change it may be helpful to know something about the characteristics of people who have been innovators. The literature contains descriptions of successful innovators from many different contexts and disciplines. Are there some commonalities? If so, they may be helpful in the selection of strategies for effecting change.

a. The cosmopolite vs the localite. First, there is an interesting application of the old adage that "travel broadens." Dissemination seems to be facilitated when the innovators get around, particularly outside their normal environments. A study by Ross showed that school teachers got most of their ideas outside their communities, and a study of Goldsen and Rales "found that Thai farmers who visited Bangkok innovated at a rate that was significantly greater than their stay-at-home counterparts." Katz reports on two studies in which midwestern farmers who were early adopters of a hybrid corn made more trips to the big city and to county fairs, and that physicians who were early adopters of a miracle drug attended more out-of-town meetings than did their late-adopter conterparts. Evan's study of educational television in that citadel of immobility, the university, indicates that the cosmopolite professor was more likely to consider and use ETV than the localite who rarely left his campus physically (and presumably psychologically).

b. Age. The data are equally good (or bad) on the role of the age of the innovator. For example, Katz' early adopting farmers and physicians tended to be younger. Similarly, Evans found the younger professors to be more receptive to ETV. Educators suspect that it is the younger teacher who is more receptive to innovation.

c. Position in and attitude towards communication networks. Mention has already been made of the multi-dimensional flow of interactions among research, development and use activities. Those who move freely among these activities seem to be among the more successful innovators. Katz reports innovative farmers belonged to more formal organizations and innovative physicians tended to be more integrated in informal friendship discussion and advice networks than their less innovative counterparts. Richland's study of a traveling seminar modelled somewhat after the Agricultural Extension Service implies educational innovators are more completely involved in a variety of communication networks.

d. Personal or organizational affluence. Individual early adopters seem to be more affluent than late adopters. (For example, they plant more corn acreage, have more income or have richer patients.) The two measurable (and hopefully manipulable) attributes studied by Richland in the traveling seminar which appeared to be most frequently associated with educational innovation were high teacher salaries and high school density.

e. Personal attributes and characteristics. There is just about no generalizable and reliable data on the personal attributes of successful innovators. Some of the personality descriptions in the literature suggest the innovator is not the most comfortable person to have around.

6. Levers to pull and buttons to push in effecting change.

What kinds of leverage can the change agent bring to bear in terms of his assumptions concerning the nature of the client? Guba has provided a simple taxonomy which should have considerable pragmatic value. He opines that the client may be viewed as having one or more of the following characteristics:

a. He is rational. He can be convinced by data, by rational, empirical, logical evidence. The logic of the change proposal will lead him to adopt it. Historically, the psychologist has leaned very heavily on the use of data. He would rarely advocate change unless he himself was convinced by the evidence. We have implicitly assumed that since we are rational beings, so is the client. Our experience suggests the assumption is a bit naive, or at best only a partial truth.

b. He is untrained. Therefore, the client must be taught how to perform in relation to the innovation. The didactic approach requires the use of workshops and in-service training.

c. He is a psychological entity who can be persuaded. A variety of what Bennis and Lippitt might term self-actualization devices have been used to attain this laudatory goal.

d. He is an economic entity who can either be compensated or deprived. The federal government provides an excellent example of the use of financial rewards (and punishments) through a multiplicity of programs to assist educational institutions and other segments of the national community to move in desired directions.

e. He is a political entity who can be influenced. No one working for government...or in industry...or in education at any level can fail to have been exposed to examples.

f. He is a member of a bureaucracy who can be compelled. Pulling this lever, however, does not normally produce a high yield.

g. He is a member of a profession who can be professionally obligated.

SUMMARY

In this paper, I have attempted to indicate the importance of improving our understanding of the process of change and to summarize some of the relevant literature on the diffusion of innovations drawing from studies in rural sociology, cultural anthropology, industrial settings, education and psychology.

What do we do with such information as I have summarized? For one thing, we should attempt to develop a model of change which is also based on the specifics of our own situations. A model can provide some guidelines for trial and modification. Both theory and practice may profit.

The urgency of the need for improved practice and better theory is great. If you will, think of yourselves as the singers mourning the death of the poor titwillow in the well-known lyric which I have conveniently paraphrased for you as follows:

> "If you remain callous and obdurate, I, shall perish as he did, and you will know why. Though I probably shall not exclaim as I die, 'better theory better practice, better theory, better practice...'"

THE CHANGE PROCESS

Panel Discussion

Galen Drewry, Director
University of Georgia Institute of Higher Education

There is a story about two little first grade children who were playing in the schoolyard. You know that our children are so much more sophisticated, mature and knowledgeable, at whatever age they may be, than we were, or at least I was, at their age. These two little boys were playing in the schoolyard and they saw a real snazzy automobile drive by. The first boy said, "Oh, look at the Chrysler Imperial." But the other one said, "Oh no, that's not a Chrysler Imperial. That's a Cadillac. I can tell by those tail fins and the way the hood is shaped." As they walked along, they heard a roaring sound overhead and they looked up and one of them said, "Oh, there goes the new C5A." And the other one said, "Oh no, that's not a C5A, that's a F105--I can tell by that sharp pointed nose and the hump on the nose and the beautiful lines of that plane." And then they continued to play. In a few moments the school bell rang. One of them turned to the other and said, "Well, I guess we'll have to go back in and string them damn beads again."

We are discussing this question of the change process on this panel. You know, when we think about it, all of education is really a change process. This is the fundamental purpose of education. So our conference might really be called "Strategy for Education" as well as "Strategy for Change." We hear this word "change" a great deal, not only in educational circles, but throughout our society these days. We are aware of very rapid changes in technological processes. I think we are sometimes more aware of them when we are bogged down than we are at other times. But we're also aware, most of us, that some of our social and educational processes have not changed as rapidly, have not kept pace with the technological changes that have occurred. During the past year, indeed, during the past few years, we have had our attention called very forcefully to this matter of educational change, primarily by the students in our colleges. So, indeed it is time for us to take a good long hard look at the matter of the change process and how it comes about.

I think that most of us are dedicated to the notion that change is desirable and needed, but that it should be through orderly and not disruptive, violent change. Indeed, our whole system of society is based on the fundamental assumption that change can occur to meet the needs of people without violence. This notion is built into our very basic structure of government and our very basic way of life. It has been tested many times, and I think that we could review the whole history of our country and see that it has normally involved a

process usually of orderly, gradual change and secondly, that the whole process has been a matter of the extension of the rights and the good things of life to a larger and larger proportion of our total population.

Going back to the very early days when you had to own property to vote, the only time that this notion of orderly change was put to a very severe test within our country was in the Civil War, when the efforts to change gradually failed and there was a nation-wide disruption. But change occurred and again greater freedom was extended to an additional portion of the population. We could go through the late 19th century and the extension of rights and privileges to the working class, and the 20th century and the extension of fundamental rights to women, and so on through our history. Crises have occurred, but we have nearly always been able to meet them through an orderly and direct process of change. I hope and expect that in the educational crises which we now face, we can continue that kind of orderly change.

One of the ways in which colleges may be able to effect change more effectively, we feel--and we have done some thinking, some writing and some experimentation with this on our staff--is through a team approach to development. You could conceive of the entire college, the entire institution, as a team with various working elements in it. We have zeroed in on two particular aspects of this total team: (1) the administrative team in the institution, composed of the chief administrative officers and the academic team, composed of the academic dean and the divisions or department chairmen, and (2) the divisional team, composed of the division chairman and his faculty. I'm going to leave the discussion of this to Tom Diener who is a member of our staff at the Institute of Higher Education. He has been most active in the development and implementation of this concept of teamwork in some of the colleges.

THE CHANGE PROCESS: TEAMWORK WITH FACULTY

Thomas J. Diener
Assistant Professor of Higher Education
Institute of Higher Education
University of Georgia

Some weeks ago I was browsing through literature describing a college similar to many institutions represented at this conference. The brochure I was reading related, in the style typical of such public relations materials, the various virtues of this particular institution. After noting the usual attributes of friendly atmosphere, full accreditation, and modern and completely air-conditioned buildings, I was suddenly stopped dead in my tracks.

The tone of the entire article was in emphasis of the point that X College was particularly mindful of its responsibility to respond to societal changes; that as an institution, it had been changing and was "constantly projecting changes that would enable it to better serve in the field of higher education." Then, in the midst of this glowing report, came a sentence which was probably more accurate than the writer anticipated. It read like this: "The faculty has changed little except to be enlarged."

I'm sure the writer intended to demonstrate by this sentence the fact of lengthy tenure and a relatively low rate of faculty turn-over. For me, however, he provided not only a note of humor but, much like a dash of cold water in the face, a chilling realization that he had indeed written a sobering commentary on one of the contemporary conditions in higher education.

Our society is changing very rapidly. Our institutions are changing and, as the brochure indicated, "constantly projecting changes." But, so sadly, it is often true the faculty has changed little except to increase in number.

Part of the thrust of Title III of the Higher Education Act of 1965 as well as this program with developing institutions has been challenge that condition. Part of the meaning of Title III is to assist, induce, and accelerate change--faculty change. Developing

implies changing, but one of the areas in our colleges most resistant to change and most needful of it is academic affairs.

In the few minutes alloted to me, I would like to address myself to three propositions. Please use these as mental hooks on which to hang some thoughts of your own or try to defend the pro or con of each of them.

PROPOSITION #1: OUR UNIVERSE IS NOT ORGANIZED BY ACADEMIC DEPARTMENTS--SO WHY SHOULD OUR FACULTIES BE SO ORGANIZED? No one in this room is quite old enough to remember a time when we have not had academic departments in our colleges and universities. But there was such a time and, in a relative sense, in the not too distant past.

Amazing as it may seem to us now, just a century ago the average size of a faculty was ten. The predominant model was a small rural campus with one or two buildings, a hundred or so students and a faculty of young men with bachelors degrees and, perhaps, some additional work in theology. This quiet little enterprise was presided over by a benevolent president who also taught students and was in charge of all the functions we know today as business affairs, development, student affairs, and academic affairs.

Yet this model of simplicity and tranquility was to change, especially in the late 19th century, as a host of social, economic, and educational forces arose to challenge it. I will not go into detail on these now, but you will quickly recall some of these forces: the rising influence of the German university on the American college; the rapid increase in knowledge; the increasing attention to research; the drive toward professionalization of the college faculty; the moves toward specialization.

Thus what has happened is that the structural forms (and many of the attitudes) of the researcher and the graduate schools have permeated our undergraduate colleges. What has happened also is that organizational forms thought so appropriate for analysis and for research purposes have been adopted wholesale and without critical review by institutions whose main purpose is not research but teaching; whose tools are not exclusively analytical but who strive for synthesis, for a linking together, an integration of knowledge.

At the college level we have fallen victim to the error that the ways and forms for producing knowledge are valid for the transmission of that knowledge.

For your careful consideration, therefore, let me suggest this: the academic department, as we know it, is obsolete. It restricts our efforts to communicate. It hampers our efforts to synthesize and develop comprehensive educational programs. It is a most effective block in the way of meaningful change in our colleges.

PROPOSITION #2: STRUCTURE IS IMPORTANT..Despite our comments about Proposition #1 (that the universe is not organized by academic departments), one is not necessarily led to the conclusion that all structures are useless. Quite the contrary; the skepticism I have flung at the traditional form of faculty organization--the academic department--is directed at that particular form itself and not the general notion of structure.

Permit me to illustrate. In a number of colleges in this AAJC Program With Developing Institutions, it is very apparent that many men of good intent work long hours with sincere dedication to their discipline, to their students, their colleagues, and their college.

But our format for faculty organization fails to provide structures so this individual dedication can be translated into significant group action. That is, when a relatively small faculty is splintered into a variety of tiny departments, the result is likely to be professional isolation. To paraphrase a popular ad: is that any way to run a college? Not, I think, if we are seriously dedicated to the principle of significant faculty participation in institutional affairs.

The need is great, then, for some kind of faculty organization which will, for the kind of institution represented here, permit groups of faculty to focus on their job of instruction, and facilitate, not hamper, their systematic review and modification of the curriculum.

What I am really suggesting is a new order of functional faculty organization, based on the demands of a teaching institution as opposed to the demands of a research or service institution. Some colleges represented in this room have attempted new approaches to this problem.

One of the more common of these approaches is creation of the academic division rather than the academic department. There is no standard definition of what an academic division is. This is usually determined by the institution itself. But the concept is an attack on many of the ills created by the narrow and specialized point of view of the department. It emphasizes structurally the relatedness of a cluster of disciplines and provides the vehicle by which curriculum planning can be done on a task force or multi-disciplinary basis.

To sum up: structure is important; so important we cannot permit archaic forms of faculty organization to stifle faculty efforts to change.

PROPOSITION #3: THE ORGANIZATION OF ACADEMIC TEAMS IS AN IMPERATIVE FOR THE 1970's. Some writers have recently been so unkind as to suggest that faculty (as such) is dead. Faculty, so they say, has been killed by individualistic academic entrepreneurs who have been seduced by the rewards system of the profession and

who pay little attention to the needs of their students or the implications of other disciplines for their own. If not entirely true, this accusation has sufficient substance to make all of us rather uncomfortable.

The cries heard today for relevance in the curriculum are, of course, legitimate. But they are not new. The rise of schools of science outside the colleges of a century ago and the development of the land-grant colleges with their emphasis on the "practical and mechanic arts" are apt illustrations of reactions to long ago pleas for a more relevant education.

One of the significant differences, however, between a century ago and now is the size of institutions and faculties. For most institutions, the day of a general town meeting of the faculty to carefully consider matters of curriculum is gone. If those days are gone, however, may it also be that the days are numbered when faculty members individually form courses without reference to the work of their colleagues--and the curriculum is formed simply by totaling up all of the courses offered by all of the instructors.

The academic team may provide a conceptual scheme by which faculty may mean more than just a loose collection of individuals and the call for curriculum reform can be met rationally and systematically.

Let me suggest at least five benefits to be derived from divisional teams of faculty working together:

(1) The academic team serves to integrate the efforts of faculty members to construct and modify curriculum.

(2) The academic team serves as a channel for both the reduction and creation of tension.

(3) The academic team is a mechanism for inducing change.

(4) The academic team is a formalized structure for communication.

(5) The academic team is a means to provide for planned involvement of the faculty in policy formation.

To sum up, then:

> Faculties need to be organized to facilitate change. Our present structures militate against change. The team approach to academic administration provides a rationale on which to base functional structures for teamwork by faculty.

THE STUDENT PERSONNEL WORKER AS FACULTY INNOVATOR

Richard C. Richardson, Jr., President
Northampton Area Community College, Bethlehem, Pennsylvania

I would like to take just a few moments to try to relate change directly to the institution and then the student personnel worker to that. I think the fact that all of us are here is testimony to the fact that we believe that change is both necessary and desirable. There is, however, frequently a tendency to equate change with progress. While the two are related, we must bear in mind that there may be regressive as well as progressive change.

Also implicit in our reasoning seems to be the concept that someone needs to induce or possibly provide the direction for change. Let's see if we can pull some of this stuff together for just a moment. If we think back to our psychology days, the concept of differentiation refers to the ability of an individual to function at successively higher levels. Presumably, this can go on throughout a lifetime of an individual as he engages in more complex behavioral patterns. Now I would suggest to you that organizations are like individuals in connection with this concept of differentiation more than that they are composed of individuals in varying levels of development with different capacities to differentiate or cope with new behavior such as behavioral situations.

Progress or growth for an organization is like the progress or growth for the individual raised to the nth power, with "n" representing the number of individuals within the organization. Thus it can be seen that the complexity of directing the process of change will vary directly with the size of the organization that is involved. Colleges, like all types of organizations, are constantly encountering new conditions which require different responses if the institution is to achieve maximum effectiveness.

Unfortunately, many institutions, like many individuals, have been damaged in some way, and have lost their ability to differentiate. As a result, we may observe unchanging response patterns that become increasingly ineffectual for the conditions with which they must cope--a rigid curriculum, highly structured and often ineffective methods of relating various members of the college community with one another, and relating the unchanging curriculum to the mainstream of higher education.

It's interesting to note that abnormal institutions, like abnormal individuals, will frequently survive and even cope with their environment to a certain degree, but the survival is a precarious one based on assumptions that are not founded on fact. A sudden strain, and the entire apparatus is thrown into upheaval. Unfortunately, while there are

well-developed techniques in mental institutions for curing the emotionally disturbed individual; but the only cure for the institution seems to be to fire the president. This technique has some of the same shortcomings as lobotomy.

What I've said to this point simply illustrates that change is an extremely complex process. Because the college exists to interpret change, and to aid those whom it serves to accomodate to change, internal processes must be developed to recognize new situations in the institutional environment and provide appropriate responses coping with the changing situation.

I'm going to suggest briefly a six-step process in which this change takes place, and then I'm going to relate the student personnel worker to this six-step process.

First, the college's environment must be studied on a continuing basis to detect changes that may call for new responses.

Second, after detecting changes in its environment, the college must consider its existing repertory of responses to determine if any are appropriate. And this is a critical step. As a result of this analysis it may discover that there is a need for a change. However, a change in environment doesn't always call for a corresponding institutional response.

When the need for change has been recognized, some way must be found for relating this requirement to those who will be affected. Frequently this is the most difficult part of the process. With a child, natural curiosity will insure the necessary level of experimentation to induce the process of differentiation. With organizations, intellectual curiosity about alternative institutional responses may be an extremely rare commodity. Further, immature organizations, and I would guess that many developing organizations fall into this category, frequently fail to encourage experimentation and change at various stages in the process of development.

Once there is general agreement that some change is necessary, the type of change to be implemented must be selected from the alternatives that present themselves. It is at this point that many administrators make their worst mistake, in attempting to induce the process of change. They proceed immediately from recognizing the need for a change to determining what that change should be, and then they attempt to coerce their faculty into accepting the kind of change that they feel to be most appropriate. Obviously, this kind of approach does not allow the institution to proceed through the normal levels that are required in order for change to occur, and the result can be conflict between the administration and the faculty, and frequently an institutional stalemate.

If once an alternative has been chosen, it must be implemented. And this is why I will stress involvement when I talk about the student

personnel worker. Without the involvement of those who will be affected by the change, you cannot secure the kind of commitment that is necessary in order to make the change effective.

Finally, the alternative selected must be evaluated. Without evaluation you have no idea of knowing whether a change is a progressive change and hence should be continued, or is a regressive change and hence should be discontinued or replaced by something else.

Now let's relate the student personnel worker to the change process. The student personnel worker is most frequently a behavioral scientist. He does, or at least ought to, understand the process of change within the individual since this is his stock in trade. With just a little extrapolation, he should be in a position to relate the dynamics of change in the individual to those of change within the organization. Consequently, I would see the student personnel worker as a facilitator in the process of change itself. He should be able to advise other members of the organization how to initiate and implement the process of change. He should also be able to assist in presenting the need for change in such a way that it will be recognized by those who are involved. In this capacity, the dynamics of change itself would become a major concern of student personnel workers.

In addition, the student personnel worker is in a position to know students and to know aspects of the institutional environment more intimately than any other member of the college staff. It is he who is most likely to relate directly to feeder schools and to be able to understand their perceptions of the institution and their problems in relating to the institution. It is he who is most likely to become aware of problems that involve transfer institutions. The college counselor may get valuable feedback regarding the curriculum and the process of instruction. In these roles the student personnel worker is in an excellent position to identify changes in environment that may call for changes in institutional response.

Third, the student personnel worker normally has the responsibility for guiding the development of student government. Far too frequently student government is used as an administrative device to control student behavior. Under more favorable circumstances, it can become the means through which students assume an important role in the governance of the institution. If you will recall my earlier remarks about the importance of involvement in the change process, you may see the advantages of having students represented in the policy formulating process. It is not easy to establish the machinery, or to develop the climate that will foster such involvement, but the failure of institutions to respond to the need for change is only too evident in some of the disorders that have occurred.

Next, the student personnel worker is in an excellent position to assist in collecting the evaluative information that is necessary to enable the institution to crank in its error corrections. Not only are student personnel workers frequently trained in methods of institutional research, but in addition, they have access to those effected by change, the students, and to the records and data that may be

necessary to document the results of change. They may also be in a position to work with members of the faculty to assist them in establishing research designs that will provide more substantive information concerning the results of a new experiment in instructional methodology. Far too often we find that the only documentation of the superiority of one approach to another is the rather biased subjective judgment of the instructor who has a vested interest in the approach he has promoted.

Finally, the student personnel worker can be most instrumental in helping the institution to develop a climate that is receptive to change. The concept of basic encounter groups which represent a way through which students and faculty can become more sensitized to their environment and can better understand the ways in which they can most effectively relate to it, constitutes a current procedure which seems to hold great promise for the future. It should be pointed out that sensitivity training as it occurs in the basic encounter group process is as effective for members of the faculty as it is for members of the student body. You will note that I have not mentioned the term innovation. You'll be pleased to learn that my failure to mention this term has been deliberate and not as a result of misunderstanding my assignment. In my opinion, the term innovation has been rather battered over the two years of this movement in certain circles to such an extent that it has begun to carry an unpleasant connotation. (I'm not referring to innovation as defined by our prior speaker.)

Innovation is just another word for change, with an additional connotation. Change is something that occurs naturally as a result of changing conditions and the improved ability of the institution to relate to these conditions. Whether the changes involved improved institutions, economies of institutional operation, or better climate for human development, the fact remains that such changes occur naturally.

Innovation, on the other hand, frequently implies a change that is new and which may be a result, not of a change in environment, but of someone's idea as to how a certain response ought to be implemented, as opposed to the way in which it is being implemented. Innovation in child rearing can produce poor results. Innovation in teaching reading that de-emphasized phonetics resulted in an entire generation of college students who are unable to spell. So you might say, that though I am very much in favor of change which helps the institution in relating more effectively to its environment, I'm very much opposed to innovations which force people to do things in a way which is different simply to be different. If it can be demonstrated that an innovation does indeed result in improved institutional response patterns, then I would endorse it wholeheartedly as desirable change.

I would not criticize those who seek to innovate. Rather I would say to them that their innovations should be carefully controlled, and should take place under circumstances that permit evaluation. In this way an entire institution will not be subjected to the stress and strain of changing its basic response patterns without solid evidence that the change will produce improvement rather than new problems....I would suggest to you that in our eagerness to innovate, we should be careful not to replace existing evils with new ones.

FACULTY INNOVATION:

THE TEACHING CONSULTANT

Joseph Seidlin, Teaching Consultant
Alfred A & T College, New York

In 1965 I retired as Dean of the Graduate School at Alfred University and through a variety of circumstances I became associated with the Agricultural and Technical College at Alfred, New York. At the time, both the administration of the college and I were rather vague as to the nature of my activities, but by October it became clear to both the administration and me that I could be of greater service to the institution by serving the faculty as a consultant.

What had to be established in the minds of the faculty was my complete independence of administrative entanglements. In brief, I had nothing to do with retention, promotion, tenure, salary increases, or any other institutional aspects of a teacher's relation to the college. I believe it took almost half a year to convince the faculty that that was the case.

At first, the consultations were informal and occurred at any time and any place where a member of the faculty and I happened to be. However, few members of the faculty actually invited me to observe their teaching. At the beginning of the Fall term of the following year, classroom visitations followed by criticism and general evaluations became quite commonplace. To me, the crowning achievement was a blanket invitation from an ever increasing number of the faculty to come in their classrooms whenever a class was in session and not to wait for an invitation.

A story, which spread like wildfire, helped establish my independent, neutral position: During one of the meetings of the administrative council, one of the administrative officers asked President Huntington whether I would be responsible to the newly appointed dean of instruction. Replied Dr. Huntington, "Why would he? He is not responsible even to me."

In addition to consultation and class visitations, I hold a monthly seminar. The topic is usually decided on by interested members of the faculty, and ranges all the way from methodology to the philosophy of education. Probably the topic most in demand involved tests and testing, grades and grading, and optimum curriculum content. In the beginning of the year, three or four seminars during the first school month are part of the orientation program for new members of the faculty.

I know of no other higher institution of learning that employs a teaching consultant. Whether an arrangement like the one I have

described is feasible as a general practice in institutions of learning, I don't know. At ATC, at Alfred, the climate for such a venture seemed just right and probably is the most important single factor for whatever success the program has had. I am not certain that I could write out the detailed nature of the training, experience, and other qualifications for a teaching consultant. It seems to me that it will be difficult, if not impossible, to devise a training program for teaching consultants. It may not be feasible or desirable to devise schemes for evaluating the program. As I see it, part of its success is attributable to the complete informality and the nonpublicized, nonrevealed professional relationships between the members of the faculty and the teaching consultant.

There are a great many definitions or descriptions of teaching. The one to which I subscribe is a very harsh one. To wit: "Teaching facilitates learning." If whatever it is that a "teacher" does, no learning occurs, then there has been no teaching. Stated in a slogan-like way, "No learning, no teaching." (The converse of this is obviously not true.) However exciting a teacher's lecture may be, however entertaining, however engrossing, if no learning occurs, then there has been no teaching. If we accept this definition of teaching, then clearly, the goodness of teaching varies all the way from deadly dull to brilliantly effective. Whether teaching is a science or an art, it is a process, and like any other process, even ditch digging by hand, it can vary all the way from poor to excellent. Taken in this light, all the gadgets, the growing variety of audio-visual aids, either help or hinder the essential quality of teaching--that is, increase or decrease the resultant learning.

Certain principles in teaching must be accepted:

1. Once cannot teach what one does not know.
2. One may know, and yet, be unable to teach.

In the literature on or about teaching, we do find two extreme viewpoints that, in a sense, contradict the two principles I have just enunciated:

1. If a person knows his subject, he can teach it.
2. Whether a person knows his subject or not, if he loves children, he can teach.

I must hasten to add that even today we find these two non-supportable, extreme points of view.

Some years ago Dr. Paul Klapper made this statement: "We find the best teaching at the elementary school level; not quite so good teaching at the secondary school level; and the worst kind of teaching at the college level." You need not feel too bad about Dr. Klapper's evaluation, since when he made it there were very few, if any, two-year colleges. One of the objectives of two-year colleges when they came into being was to provide more effective teaching for their students, more especially so since the four-year colleges, aping the universities, demeaned teaching to a second-rate activity (second that is to research and publication).

THE INNOVATIVE COLLEGE

B. Lamar Johnson
University of California, Los Angeles

I am particularly pleased to be here today to participate in this conference on "Strategy for Change." The times in which we live demand bold and imaginative thinking and planning at all levels and in all aspects of education. These demands particularly, however, confront the junior college, for it is the institution which must bear responsibility as our nation, with rapid strides, moves toward universal higher education.

Devoted as it is to planning for change and improvement, this conference can make a notable contribution to the highest realization of the junior college dream, and, in particular, contribute to the finest achievement of their potential for hundreds of thousands, and, indeed, millions of our citizens and citizens in preparation.

With the assistance of a grant from the ESSO Education Foundation, I have recently completed an 18-month survey of innovations in junior college instruction. My survey took me to junior colleges in 22 states. By means of personal visits, conferences, or by written reports, more than four out of ten of the public junior colleges in our nation were included in the survey.

Perhaps the major finding of my survey can be suggested by two titles: one of a monograph, and the other of a book. In 1963, I made an exploratory national survey of innovations in junior college teaching--a survey which I reported in a monograph under the title Islands of Innovation.[1] My disappointment in the findings was indeed suggested by the title of the report. At that time, I wrote, "The general picture revealed in the survey is one of significantly less experimentation than would be expected, or certainly hoped for, in an institution which is often referred to as 'the most dynamic unit of American education.'"[2]

My more recent survey is, however, reported in a book, the title of which is Islands of Innovation Expanding.[3] This title suggests more encouraging findings. Although much remains to be done, innovation and experimentation are clearly increasing in the junior colleges of our nation.

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1. B. Lamar Johnson, Islands of Innovation. Occasional Report No. 6 from UCLA Junior College Leadership Program. Los Angeles: School of Education, University of California, Los Angeles, 1964.
2. Ibid., p. 12.
3. B. Lamar Johnson, Islands of Innovation Expanding: Changes in the Community College. Beverly Hills: Glencoe Press, 1969.

On the basis of the findings of my recent survey, I propose this forenoon to make three points:

1. Change and innovation are taking place in junior college instruction.
2. There are procedures and conditions which encourage change and innovation in instruction.
3. Change and innovation are not enough.

A. Change and Innovation Are Taking Place

Change and innovation are taking place in junior college instruction. From a multiplicity of possibilities, I shall identify ten innovations which are taking place in junior colleges.

Before reporting these developments, I must observe that in making the survey, I consciously avoided definition of "innovation." The spelling out of definitions might, it was feared, restrict and limit the reports of new instructional developments from many colleges. Sought were descriptions of plans which were regarded as innovative by the colleges reporting them. Practices identified as innovations at some colleges were regarded as traditional and "old hat" at others. Nevertheless, I thought this opportunity for colleges to report "the new" as viewed by them important in assuring the "reportorial freedom" which characterized the survey.

Accordingly some of the new developments which I am about to report may be regarded as "old stuff" by some of you. All of these developments have, however, been reported as innovations by a number of junior colleges. Each of them, in my judgment, merits our consideration.

1. There is a continually expanding interest in and use of programmed instruction in junior college teaching. Programmed instruction is directly relevant to the role and characteristics of the community junior college. The open-door college with its heterogeneous student population is obligated to provide a highly individualized instructional program--both for the slow learner and for the superior student. Programmed learning can be an important vehicle for individualizing teaching, in terms of content and rate of learning, both in classrooms and in learning centers.

2. The most discussed (though at times skeptically) recent development in junior college teaching is audio-tutorial teaching, a plan of programmed instruction which embodies a systems approach to instruction. Regardless of what evaluations of audio-tutorial instruction may ultimately reveal, program developments in this field at Oakland Community College and at Purdue University have made a notable contribution to the discussion, analysis, and, hopefully, the improvement of junior college instruction.

3. Games are occasionally used in junior college teaching--in such fields, for example, as English, political science, economics, and business. In stimulating interest and motivation, games can

have important values in many areas of teaching. There is some evidence that games can be notably valuable in motivating and teaching low achieving students.

4. A few junior colleges are making significant use of television in their instructional programs. With the notable exception of Chicago City College, junior college courses are seldom, however, taught by open circuit television. (Editor's note: A successful experiment in teaching developmental English by open circuit TV was conducted by American River College, in California recently.)

5. An increasing number of multimedia aids to learning are used in junior college teaching. These include, for example, video tape recorders, audio recorders, dial access systems, electronic pianos, multiresponse systems, teletype, long-range shortwave radio, and computers.

6. Some junior colleges provide electronic lecture halls which accommodate up to 300 students. Upon occasion these rooms feature electronic equipment with dual controls at the speaker's lectern and at a projection alcove. Included are such facilities as tape recorders, turntables, wireless microphones, slide and film strip projectors, sound motion picture projectors, electronic pointers, television cameras and receivers. Teaching teams which include instructors, media experts, graphic artists, and technicians often work cooperatively in planning and offering instruction in such rooms.

Among the more imaginative proposals for a hall for learning is the projected sensorium (sometimes referred to as "the psychedelic classroom) at Laney College, Oakland, California. Plans for the sensorium include:

1. Traveling and stereophonic sound.
2. Three-dimensional projection--that is, simultaneous projection at front, sides, and rear.
3. Atmospheric control--the capacity to change temperatures from 40° to 80° in a matter of minutes, and the capacity to whip up winds--even gales--at will.
4. Aromatic control--a wide selection of aromas and odors diffused through the air-conditioning system on programmed call.
5. Touch control--wheels outfitted with a continuum of textures from smooth to rough, from glass through fur, to hardened emery surfaces, attached to specially designated seats.
6. Taste control--specially formulated pills with several flavors, some being layered to constitute a continuum of taste from sweet to sour.
7. Motion control--seats mounted on a movable floor which can be tilted, shaken, or shimmied at will.

A limited pilot version of the sensorium has been used in teaching art appreciation at Laney. From one-fourth to one-third of the sessions of participating classes are held in the sensorium, which is also available for experimentation by teachers in other fields.

In a real sense, the sensorium aims to epitomize Marshall McLuhan's assertion, "the medium is the message," as it contributes to both the mood and the substance of learning.

7. A number of junior colleges use students as teachers--tutors, for example--and counselors. Students who serve as teachers often have a built-in advantage in communicating with their peers, whom they instruct. This may even be obtained with students whose own scholastic achievements are relatively modest. Students who have recently faced and resolved difficulties which now confront those whom they teach may be effective in helping their fellow students learn.

In addition to the value of their service to others, students who teach are reported to have personally benefitted from the teaching process.

8. A few junior colleges have student-operated experimental colleges--in which students assume responsibility for planning and carrying out instruction designed for them as learning participants, their own classes and courses. Upon occasion, new plans launched in student operated experimental units are adopted in regular college offerings.

9. Cooperative work-study education is assuming a role of increasing importance in the junior colleges of our nation. This plan is particularly appropriate for the community college. In addition to helping students achieve occupational competence, an important goal of the two-year college, it reemphasizes the community dimension of the junior college as the college draws upon community personnel and facilities in program planning and operation. In addition, the income students receive from employment makes it possible for many of them to attend college.

10. The definition of specific instructional objectives as a basis for developing the curriculum, for improving instruction, and for initiating and carrying out innovations, is becoming an important emphasis at some junior colleges. Innovative procedures or multi-media aids to learning must not be ends in themselves. Desired outcomes must be clearly and succinctly defined. If this is not done, technological aids to learning may become merely the costly trappings of gadgetry; and games, for example, aimless competition and perhaps recreational fumblings.

From a multiplicity of possibilities, I have briefly identified ten developments in junior college teaching. The question now naturally arises, what are some of the procedures and conditions which encourage and stimulate innovation and experimentation?

B. Junior Colleges Use Plans Which Encourage Change and Innovation

In a recent study, Robert Edward Keuscher identifies characteristics of junior colleges which are associated with their tendency to

be innovative in teaching and in curriculum development. These are among the practices which Keuscher reports tend to characterize innovative colleges:

Well defined goals.
Systematic gathering of data on the community.
Close contact with lay committees, four-year institutions, and employers.
Well defined procedures for decision making.
Open channels of communication within the college and between the college and the community.
Resistance to community pressure groups.[4]

Clearly, the role of the administrator in encouraging innovation is of central importance. The administration of an innovating college must be committed to promoting new instructional developments and must take leadership in the formulation and faculty acceptance of college objectives. Within this framework for change, it must provide funds to make innovations possible, and it must involve faculty members in the planning of change.

In my recent survey, I sought to identify plans, procedures, and conditions which are reported to encourage innovation in junior college teaching. My findings tend to support Keuscher's general conclusions.

I shall now identify ten plans or conditions which are among those that junior colleges report finding helpful in encouraging innovations in teaching.

1. The Right to Fail. A subtle--though nevertheless realistic--factor which encourages creativity is the establishment and maintenance at a college of the right of faculty members who try out new teaching ideas to fail. The administration at Roger Williams College, Rhode Island, points out that if a college is to encourage innovation and experimentation, its faculty must have a sense of security which will permit them to be venturesome. They must be interested and willing to try out new ideas without fear that failure will threaten their status as innovators. And a dean at Florissant Valley Community College, St. Louis, reiterates this view in these words: "An administrator is 'sunk' as an encourager of innovation the first time he frowns at a faculty member who tries a new idea that fails."

When new ideas are tried, some of them inevitably will be unsuccessful. If faculty members are blamed for the failure of apparently well-conceived new plans, they are unlikely to try other innovations. The right to fail, then, is one which must be guaranteed in the innovating college as completely as academic freedom is guaranteed in all of higher education.

2. Visits to Centers of Innovation. Few changes which occur in education are completely original. Most of them are borrowed. The

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4. Robert Edward Keuscher, An Appraisal of Some Dimensions of Systems Theory as Indicators of the Tendency to Innovate in Selected Public Junior Colleges. Unpublished Doctor of Education Dissertation, University of California, Los Angeles, 1968, p. 89.

initial step in stimulating and planning change may well be to make faculty members aware of promising innovations so that they may recognize both the need and the possibility of change. Staff acquaintance with new developments in teaching can, therefore, be an important factor in encouraging innovation.

It is this viewpoint that has led a number of colleges to develop plans under which faculty members have visited centers of innovation. Perhaps the most ambitious junior college undertaking of this type was the Innovations Project at Delta College, University Center, Michigan. During the entire 15-week summer semester in 1966, 14 faculty members at Delta were employed to devote full time to seeking out innovative practices which, with possible modifications, might be useful to their college. Representatives of the project team visited 64 innovative centers--most of them junior colleges, but also a few senior institutions and research agencies--in nine states. As a result of the project, varied new plans and procedures have been adopted in teaching, counseling, and community service. Some of these are notable and will have far-reaching consequences; for example, those designed to meet the needs of low-ability students. The most important outcome of the project, however, in the words of one member of the project team, was the emergence "of an atmosphere for change. Such an atmosphere depends not on a desire to change for the sake of change, not on a glowing account that one has read but has not had the opportunity to observe or discuss with the people involved; it is an atmosphere which has been created because a large segment of the faculty has an awareness of what is happening around the nation and a desire to be part of a dynamic movement."

3. Reading. Reading is occasionally mentioned as a factor in encouraging innovation in junior colleges, since it provides means of informing staff members regarding innovative developments. Valuable though reading is, it is a less spectacular source of information than, say, travel to sister colleges or visits to centers of innovation. Much depends upon both individual and institutional motivation if extensive reading in innovational developments is to be engaged in by staff members. Yet reading can provide the spark needed to kindle the imagination which travel may only have stirred.

The Delta College Innovation Project was not, for example, entirely devoted to travel and to visits to centers of innovation. Members of the project team developed reading lists and assembled a library on innovation and experimentation. They read widely and engaged in extensive study and discussion of their reading before, during, and after their travels.

Recognizing the importance of having reading matter available for staff members interested in experimentation in their own classes, Miami-Dade Junior College has developed a Library of Innovations which contains books, magazine articles, and reports for faculty reading and study.

In Georgia, a dean described to me a plan of developmental teaching and then apologetically explained, "None of these ideas is original with us. We have stolen all of them."

To this I replied, "Fine, the purpose of the survey I am making is to encourage such thievery."

In connection with reading, I have been interested in observing that at some colleges, as an aid to encouraging both innovation and staff interest, faculty members in sizable numbers have been reading Islands of Innovation Expanding--with each of them agreeing to identify one or two innovations which he would recommend for consideration (with appropriate modification, of course) at his college. Upon occasion, staff members then report their recommendations for innovation at a faculty meeting--initially, in small groups, followed by a panel-symposium in which a representative of each small group participates.

This plan is reported to encourage junior college faculty members to become first-class idea stealers.

4. Saturation of Campuses with Multimedia Aids to Learning. Some junior colleges "saturate" their campuses with multimedia instructional facilities as an aid to stimulating faculty members to creativity in teaching. At such colleges, many varieties of technological aids, including the local production of teaching materials, are made generously and conveniently available to faculty members. On the several campuses of the Junior College District of St. Louis, for example, the eminently convenient and generous provision of aids to teaching (including electronic facilities as well as printed matter) is notably important in encouraging and aiding instructional innovation and experimentation. The provision of these facilities is coordinated by the district-wide "director of instructional services"--with personalized service provided on the respective individual campuses.

Miami-Dade Junior College, in its learning resource center, provides a library of innovations with an "assistant in learning" available for service to the faculty. In the innovations library are the latest electronic and technological aids to learning, with an assistant available to demonstrate and assist in making plans for their use in teaching.

It should be noted that an increasing number of junior colleges are establishing instructional resource centers. Such centers typically include books and other printed matter as well as various technological aids to learning. These "libraries of tomorrow" can and do stimulate, encourage, and support innovations in teaching. This is particularly true when the staff of such centers are highly qualified in assembling, producing, and administering multimedia instructional facilities and also in the practices and principles of learning and teaching.

5. Evening Programs and Student-Operated Experimental Colleges. Evening programs often have a degree of freedom and flexibility which

may not be present in regular daytime offerings. A number of colleges report that new courses and plans of teaching are often "tried out" in the evening. Plans that might be turned down by a college curriculum committee are upon occasion approved for offering in the evening--and after proving to be successful are added to the curriculum. Similarly--as I have noted earlier--courses launched in student operated experimental colleges are at times added to the college curriculum.

Evening programs and student-operated colleges can, in the finest sense, become experimental units which advance the frontiers of instruction in the junior college.

6. Manageably Small Experimental Units. A number of colleges with large enrollments report plans for encouraging innovation and experimentation by establishing--within their larger entities--manageably small experimental units. Among senior colleges and universities, Wayne State University has, for example, established and operates Monteith College as an experimental college; Hofstra University has its New College; Michigan State University has its residence hall plan; and Stephens College, its house plan. The University of the Pacific and the University of California have adopted a cluster college plan--giving rise to such slogans as "We grow larger by becoming smaller," or "We seem smaller as we grow larger."

Several junior colleges are also developing plans for establishing relatively small experimental units. Laney College has received a grant from the California State Department of Education to plan an experimental vocational college. Student participation in program planning and operation and individualization of instruction features plans presently being projected.

In the spring semester of 1968, El Centro College in Dallas, Texas, established an experimental "Mini-College," an instructional unit in which five instructors teach five courses (English 102, History 102, Art 104, Psychology 105, and Mathematics 101 or 115) to the same 180 students. Also available are the services of a counselor, reading specialist, media specialist, data processing director, and curriculum coordinator.

Mini-College aims to add new dimensions to team teaching as relationships among various fields are identified and explored, and as the five instructors, aided by other staff members, work together in teaching a single group of students. Mini-College also aims to help students achieve a sense of personal identity by becoming members of a small group within a large institution.

All students in Mini-College meet as a group from 10:00 to 10:50 a.m. from Monday through Friday, each course being responsible for one session each week. All instructors attend these sessions, which feature guest speakers, films, panels, and, upon occasion, lectures by staff members. The sessions are also used for testing

purposes. Students meet weekly in groups of 20 in single sessions for each course. Seminars limited to from five to eight students are held for honors work or remedial instruction, as the need dictates. These and independent study contribute to the personalization and individualization of instruction. Since students in Mini-College have five courses in common, field trips can readily be scheduled.

As an aid to encouraging experimentation, Cypress Junior College, California, is in the process of developing a "house plan" under which the "bigness of the college" will be broken up into manageably intimate groupings and areas. As conceived at Cypress, a "house" is an architectuarally designed area which will accommodate the major educational activities (stated in a broad sense to include out-of-class activities, counseling, and some instruction) of from 400 to 1,000 students. Included in each house will be academic quarters, food services, a book catalog of library holdings, carrels, a selection of clubs, instruction in broad areas (as, for example, fine arts), intramural athletic organizations, and a substructure of student government. A student assigned to a house will have a major portion, but not necessarily all, of his instruction in his particular house.

7. Agents of Change. Innovations are often stimulated by developments outside a college. Visits to centers of innovation and participation in conferences can--as already pointed out--help faculties become acquainted with new developments in education. Being acquainted with possibilities, in turn, frequently supplies the motivation, and at times helps supply the "know-how" for innovation. In addition, however, to "outside stimulators" there must be within a college an agent or agents of change.

An agent of change may be a dean of instruction or a president, an instructor or a department head, or even a committee of faculty members and/or administrators charged with the responsibility to stimulate change. But whether an individual or a group, the change agent must have certain characteristics. For ease of grammatical construction, let us assume the change agent is an individual. He must have the capacity to stimulate creative thinking and planning, and the ability operationally to support experiments. An important responsibility is to establish the "right to fail" (to which reference has been made earlier), for inevitably some new ideas will not succeed.

I have suggested that junior colleges appoint, as agents of change, vice presidents in charge of heresy.[5]

This proposal would provide a staff member, relieved of all administrative responsibility, whose duty it would be to keep abreast of national developments and to initiate plans for exploiting them at his own institution, as well as to develop completely new plans for local use and application. Our vice president in charge of heresy would be a dreamer. He would attend conferences and assemble "far-out"

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5. B. Lamar Johnson, "Needed: Experimental Junior Colleges, " Junior College Journal, XXXVI (Oct. 1965), 17-20.

At the close of the summer, each faculty member prepares a report on what he has done and on plans for putting his proposal into action, as well as for evaluating it. Round volumes of these reports provide an illuminating history of innovative developments in the Junior College District of St. Louis.

10. Motivation by Budget Restriction. The availability of funds for innovation, whether from the operational budget of a college or from government or foundation grants, is clearly an important factor in encouraging new developments in instruction and the curriculum. But there is always the imminent possibility that colleges may be compelled to operate under reduced budgets. As college enrollments increase sharply and as the costs of education rise, taxpayers are raising questions about rising expenditures for higher education--and, indeed, are at times demanding a halt to them. Voters are rejecting bond issues and higher taxes for education, and legislatures in many states are decreasing budgets for colleges and universities.

Last month I was visiting with the president of a junior college which has a national reputation as an innovative college. As we visited, I learned that his college had one of the lowest costs per student of any junior college in his section of the nation. For a moment, I was somewhat taken aback. And then I turned to him and asked, "Tell me, how can you afford to innovate with such a low per student cost as you have?"

This was his immediate reply: "Lamar, the real question is, How can we afford not to innovate? We have," he continued, "studied this question and have come to the conclusion that we cannot--philosophically, educationally, or financially--afford not to innovate."

Abraham Baldwin Agricultural College, a college represented at this conference, was in 1965-66 confronted with a financial crisis that demanded action. For in that year the college had a 30 percent increase in enrollment and a near-stationary budget. In consequence, a faculty-side study was made to answer the question: What must we do? As a result of this investigation, several innovative practices were introduced. For one, team teaching was established for large sections of college algebra and American government. For another, audio-tutorial teaching was used in biology. Although installation of audio-tutorial instruction effected no immediate financial savings (costs of necessary equipment are high), it made possible the teaching of more students per class than formerly and resulted in a notable increase in student achievement. Reports from Abraham Baldwin indicate that "budget motivation" has been a basic factor in encouraging the faculty to innovate and to become experimentally oriented.

I am not, of course, urging that colleges should become innovative institutions solely for the purpose of saving money. I am, however, pointing out that innovation need not be limited to opulently wealthy institutions. As a matter of fact, financial restrictions may, upon occasion, serve as an impetus to change and improvement.

proposals. He would needle administrators and his faculty colleagues and, in turn, be needled by them. He would study the findings of research and analyze their implications for his college. He would be a harbinger and instigator of change. And he would be, in the most persuasive sense of the word, a "huckster" of innovation.

Kendall College, Illinois, has created a position which largely meets these specifications. Although the position is officially designated Director of Educational Development, on campus it is referred to as "vice president of heresy," or by students occasionally as the "innovative dervish." The position is nonadministrative in nature. The holder of this post teaches a class and regards himself as a faculty member, and, in turn, is so regarded by his staff colleagues. His responsibilities and activities closely parallel those which I have outlined for a vice president in charge of heresy.

At Roger Williams College, the director of planning and development is upon occasion referred to, both on campus and in the public press, as vice president in charge of heresy.

As has been suggested, an agent of change need not be an individual, but may be a committee. Monroe Community College, Rochester, New York, for example, has an Educational Systems Committee which consists of twelve faculty members, representing various departments, who are interested in experimental and innovative developments. It is the purpose of the committee both to initiate and to screen proposals for innovation. Individual staff members are encouraged to plan innovations and present them to the committee which, in turn, makes its recommendations to the president.

8. Sensitivity Training and Encounter Groups. Under the title "A Practical Plan for Educational Revolution," Carl R. Rogers, in a recently published paper, asserts:

> ". . . change must be self-directed, self-chosen . . . whether for the individual, the group, the organization or the body politic; change must not be imposed on schools or their members. An effective instrument of this self-directed change in persons, in groups, and in organizations does exist. This instrument is the intensive group experience, often called the basic-encounter group, the T-group, or the sensitivity-training group. This basic encounter group is a significant means of freeing an educational system so that it can become involved in self-directed change--a continuing process of alteration and revitalization of the organization and the persons who make up that organization."[6]

Without claiming to plan for "educational revolution," staff members at Dallas County Junior College District are using the Rogers-advocated plan of sensitivity training. In May, 1968, 40 staff members

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6. Carl R. Rogers. "A Practical Plan for Educational Revolution." In Richard R. Coulet, editor, Educational Change: The Reality and the Promise. A Report on the National Seminars on Innovation, Honolulu, July 2-23, 1967. New York: Citation Press, 1968, p. 120.

(including all administrators except five who had conflicting commitments, plus several instructors and counselors) of the District and of El Centro College participated in sensitivity training groups. The immediate purpose was to develop greater interpersonal and communications skills in the administrative staff. The implications of T-group experience for classroom instruction was, however, soon noted, particularly by the instructors and counselors who participated in the groups.

Accordingly, on the recommendation of the Faculty Association, sensitivity training was made available to some 100 staff members during the spring of 1969.

In a sense, the El Centro College plan aims to make it possible for sizable numbers of faculty members to become agents of change--and concurrently achieve the type of faculty involvement which is essential to sound innovation.

9. Budgeting for Innovation. "Change Agents" in colleges must clearly have the support of their college administration. Whether an agent of change is a dean, a vice president in charge of heresy, or an "educational systems committee," funds--of course, within the financial limitations of the college--must be made available to support the costs of planning innovations and putting them into operation.

But more than dollars must be budgeted if colleges are progressively to encourage innovation. One of the major problems in launching innovations relates to the provision of faculty time for working on plans. The interests and enthusiasms of staff members are often reflected in their "extra-time work" on new ideas and plans for teaching. At times, the introduction of innovations does not actually require additional staff time; some new plans may, in reality, be time-saving for staff members.

On the other hand, many new ideas do require time for their development beyond that available to faculty members. It is with this in mind that some junior colleges provide released time during the college year or employ faculty members during summers to work on new plans and programs.

This method is used in the Junior College District of St. Louis, where four percent of district professional salary funds are "budgeted for innovation"--two percent available for expenditures by individual campuses and two percent for allocation by the district office. These funds are largely used for employing faculty members to work on new plans and developments during the summer months. Staff members are encouraged to apply for summer employment grants, and those who have had little experience in planning projects are given assistance in preparing proposals. Application forms describe the purposes and nature of the project on which work is to be done, methods of procedure, and plans for evaluation, so that faculty members applying are well aware of the type of work that will be expected of them.

C. Change and Innovation Are Not Enough

Someone has observed that our really fine colleges "are those which are in a constant state of uneasy equilibrium." We are today in a period of history in which traditional plans and methods are inadequate for meeting the sharply increasing demands for higher education. New--many would hold drastically new--methods are crucially required. But, in this connection, Gleazer sounds a warning:

> "Let no concept be utilized and no procedure adopted which has not been examined candidly and a bit skeptically. Innovation in and of itself possesses no great merit, but innovation which results from an inquiring mind, well-conceived hypotheses, and honest evaluation gives assurance of a sensitive and lively environment for learning."[7]

To this warning, Henry Chauncey, president of Educational Testing Service, adds a solemn amen: "With so many active partners in educational innovation," he points out, "the result may be chaos unless careful, coordinated planning and evaluation accompany the current enthusiasm for change and experimentation."[8]

No industry can provide top service without knowing what it produces. Too often, however, our schools and colleges are vague and indefinite about their outputs. I have expressed enthusiasm about many of the new developments which I am finding in our junior colleges. I must, however, express my disappointment at my failure to find significant evidence regarding what has happened to student learning as a consequence of various changes and innovations. Evaluation is largely a blind spot in American education--and certainly among the junior colleges of our nation.

Innovation is not a goal in and of itself. Change simply for the sake of change cannot be condoned. New plans can be justified only if they result in improvement. Increased efficiency, productivity, and learning are the ends which must be sought.

Change and innovation are not enough. When new plans are used, outcomes must be known. Evaluation is essential. Let us accept no change, let us adopt no innovation, without building into our acceptance and adoption plans for evaluating outcomes.

If we fail to do this, innovations become little more than education novelties.

In conclusion, I would remind you that the junior college is the most rapidly growing and dynamic unit in American education. It is in itself an innovation--a different and relatively young institution

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7. Edmund J. Gleazer, Jr., "Establishment: A Trend and an Opportunity for the American Junior College," in UCLA Junior College Leadership Program, Establishing Junior Colleges, Occasional Report No. 5 (Los Angeles: University of California, Los Angeles, School of Education, 1964), p. 14.
8. Educational Testing Service. Annual Report, 1965-1966, Princeton, New Jersey: Educational Testing Service, 1967. p. 12.

indigenous to our nation and relatively unhampered by the heavy hand of tradition. There are those who suggest (and I am one of them) that the junior college offers the best opportunity for change and innovation in American education. If the junior college is to meet the heavy responsibilities which society is assigning it, it must take advantage of the opportunity it has for leadership in change and improvement. It dare not be slothful.

The junior college dream is clearly coming true in terms of the numbers of our youth and adult citizens served. The extension of the dream seems without limit if we view the potential changes that are at hand and apply them to the continuing improvement of education in the community college.

(Panel discussion follows, in the next five pages.)

CATALYSTS FOR CHANGE IN LEARNING RESOURCE SUPPORT

Mayrelee Newman
Former Director of Instructional Resources, Dallas, Texas
Now Co-Director, Institute for Training in J.C. Librarianship, Appalachian State University, Boone, North Carolina

First of all, no effective or exciting changes in the logistic support of learning by use of library and media resources can happen unless it has the full support of the administration and faculty on a community college campus. This is true wherever innovation is happening.

To challenge and experiment, professional staff must be willing to re-examine hallowed procedures, and where they seem non-essential, be willing to cast them out.

If there had not been this kind of attitude at El Centro College, the concept of catalogs on microfilm cartridges would never have been considered, much less brought to reality. The mini-college, with its small seminars and emphasis upon the individual learner, could not have been tested. Sensitivity training would never have been tried out by students, faculty, and administrative personnel.

There is much done in libraries and media centers that has no relevance for the community college person, be he student or faculty member. An appraisal of the behavioral objectives motivating the traditional English term paper may reveal whether the assignment is designed to enlarge the student's understanding of writing bibliographies and note taking, or to acquaint him with the joy of learning on his own.

There can be no question that the impact of educational technology is going to change the learning resource center, and make it a more dynamic, living reality in the learning process than it has been in the past. The times press upon us to adapt and make ready for the student who reaches us with the ability to inquire of the computer, who knows that visual or audio materials may be more appropriate sources to meet his needs than those of the printed page. We face a coming generation of extremely sophisticated learners, as McLuhan keeps reminding us.

To use the hardware and the software wisely for the benefit of the humans who need resources with which to learn poses a million questions, some rather frightening. The answers are not yet clear. Yet there must be pioneers to plunge ahead and try, so that the goals of our kind of education can be met. It is, perhaps, these kinds of leaders who are the true catalysts we seek and need. And they must be allowed to fail without total condemnation. Not every scheme can succeed.

WHAT ARE THE CATALYSTS OF CHANGE?

Virginia R. Keehan
Coordinator of Planning and Development
Chicago City College

It is imperative that administrators give leadership in planning and developing new approaches to education in the '70s; otherwise change will not take place.

Teachers must have an incentive to turn their energies toward experimentation. This incentive may be monetary or in the form of release time, but it must be available regardless of how small it is.

If some teachers become interested in the development of concepts and programs, other faculty members frequently are motivated to try new ways of doing things.

A college must be willing to bear some expense for consultants and for inservice education.

Educators need to look toward successful management practices in the areas of business and industry, and to review their concepts of development. Many things being done in business and industry can have a very practical application at the collegiate level.

The team approach to development and planning at varying levels should be tried in terms of developing new approaches to aid the disadvantaged. It might be wise to look at some of the teaching techniques used in the elementary schools, since they have been pioneering in this field for many decades.

An attitude of experimentation must permeate a college and the people must be willing to try new things without fear of consequences if colleges are to continue to make progress.

Both faculty and students must be involved in the planning process.

THE CATALYSTS FOR CHANGE IN EDUCATION

Marshall Hamilton, President
North Florida Junior College

We are living at a time when the science of education is dramatically unfolding. New tools are continually becoming available and are providing exciting opportunities for teachers to teach more effectively.

Not long ago when a person became ill the doctor would come to the patient's home. There, with the tools he could carry in his bag, the physician would treat the patient as best he could. Of course, such treatment was not expensive but diagnosis was less accurate and treatment was less effective than today.

Now it is difficult to get a doctor to make a house call. He feels uncomfortable not having the equipment, medicines, and nursing care available in his office. Cases at all complicated are moved quickly to a hospital where much more sophisticated treatment is possible.

Modern medical treatment has become much more expensive, but at the same time it has become more comforting to the patient.

Education has moved in the same direction. Some good teachers have become great teachers simply because of the better tools that are available. These tools, however, are expensive, just as they are in the field of medicine. Yet most of us are willing to pay the difference in cost for the better service that is possible.

I am suggesting that the fantastic new educational tools being developed constantly will be the catalyst for change in education. We now have in our grasp scientific means to diagnose student problems, and we have more effective means of teaching and of evaluating learning.

We can, for instance, determine a student's reading difficulty through the use of a reading-eye camera. We can see from a photograph the number of "fixes" he makes on a page, we can measure the amount of time he uses on a fix, we can count the number of regressions he makes, and we can accurately measure his speed and comprehension.

Once difficulties are identified, an array of mechanical devices can be used to correct the particular problems of an individual student.

The teacher is now stepping into the wonderful world of scientific education. The opportunities are great and the challenges are tremendous. It is the good teacher who will make use of whatever help becomes available in helping his students learn.

What we finally did was to find one very exciting English teacher who was a catalyst and who was interested in working with this group. One of the most helpful things to us was a very small grant of just $12,000, but it indicated that there was an interest in this problem, and this in itself was very helpful and useful to the college. And in addition to this--wonderful teaching-- she has found that the most useful tool in attempting to initiate a developmental communications program is the use of student tutors.

But I want to warn you a bit about that--to just simply put two warm bodies together is not going to solve the problem. Tutors are just terribly poor teachers in many cases. If all that we do is to put a totally unprepared person next to someone who needs particular help, we're not going to improve the situation. The tutors, in our judgment, have to be carefully supervised and carefully trained, and they must have continual training as the program goes on.

However, I am convinced that the use of students is a very great resource and we're delighted with the prospects and the progress we've been having.

Marshall Hamilton, panelist

I have just one comment. I was afraid that you might have gotten the idea that it is very expensive or that something has to be way out to be innovative and this is not really true. Some things can be very inexpensive and very simple. One example is not new with us--we stole is from somebody and I think it has been used in a number of places--a little cassette recorder with a cartridge in it, used by English teachers for grading papers.

Instead of just putting a few marks on a paper and a grade, there's a conference about it. Kids love it. We've had more people comment about that and it's probably the least expensive thing we are doing.

B. Lamar Johnson, chairman

I've had an impression this forenoon that has reinforced the findings of the survey to which I have alluded. The impression is that there are a lot of new things going on in the junior colleges, but there ought to be a lot more. I've been impressed this forenoon, as we've spoken about the stimulating and encouragement of change, that the fact has been emphasized and re-emphasized--we dare not innovate simply for the sake of innovation. For the first time in this conference the suggestion has been made to draw upon private enterprise as an aid and a force.

The involvement of faculty members has been stressed, with budgeting for innovation, released time, and sensitivity and T-groups. In discussing these groups, the point has been made that it is essential to have highly expert leaders and directors. Individualization has also been stressed repeatedly in this session....

FORMS OF INNOVATION

Albert Canfield
Director, Washington State Community College Board

It seems to me there are two forms of innovative practice we might talk about: one is the improvement of instruction; and the other is the extension of service. I think you can do both of these things if you have an objective, and I honestly believe that if you don't have an objective to do something productive, you can't innovate productively.

For example, do you have written someplace at your institution some words such as these: "It's our objective to provide more learning for more people at less cost." Now if that seems to be the objective of the institution, it's incredible the kind of "targets of opportunity" you can encounter.

If you are really prepared to innovate and do things better, and teach more people more at less cost, targets of opportunity do occur. If you don't have that kind of objective, you can be perfectly blind to a great variety of possible improvement

Panel Discussion

Robert E. Lahti, President
William Rainey Harper College

Question: What are some of the most important new developments in teaching on your campus and how did they get started?

Herbert Phillips, President, Lake City Junior College, Florida

One of the things we have done to improve instruction is to try to work in all people on the campus into teaching in our compensatory education program for a period of time. Between the evening teaching, compensatory teaching and teaching-in-prison program (we run five classes each session at the State prison and this also is a different kind of teaching), we have three different kinds of teaching; it can run the gamut. We ought to learn a lot more about teaching than we know and this is what we are trying to do. We don't know what to tell you yet, but maybe a year from now we can distribute some of this information.

Glenn Gooder, President, Los Angeles City College, California

I want to mention students as tutors. Because of our large population at Los Angeles City College and the great many students who are not really capable in our judgment of progressing in normal programs, we have to skirt around and try and come up with some kind of program to meet their needs as many of you are also having to do.

I disagree frankly that the best way is to assign your total faculty to this group of students because the total faculty usually does not understand this group and considers it a failure.

NEW HORIZONS: THE CHALLENGE OF THE NEW EDUCATIONAL TECHNOLOGY

Gabriel Ofiesh
Catholic University of America

(Editor's note: Dr. Ofiesh borrowed our tape of his address for purposes of transcription but could not submit the transcript in time for publication. Since he was a major speaker, we publish below a few fragmentary notes on his speech which we hope will at least suggest the general tenor of his remarks.)

Students like well-organized lectures. We have to retrain them for individualized learning. Teachers go through tribal rites, like witch-doctors. More feedback from the students is needed to test our communications. Professors should be forced to quit lecturing and establish a meaningful dialogue with the students.

We are in trouble and must start anew with all the scientific knowledge we have about changing behavior.

The time is soon coming when any school system which does not have individualized instruction using electronic media will die on the vine. Junior colleges should be completely committed to individualized learning.

What about behavioral objectives and lesson plans? These can be centrally produced by the best communicators available. "Subject matter" communicators are of dubious value, however.

The new college should have 30% of its students off-campus. The quality of instruction should be the first concern and relations with students a secondary concern. We must get rid of subjects like English composition, physics and chemistry. We must cross disciplinary boundaries.

When our students fail, we must ask ourselves, "Where did I fail?" Teachers of the handicapped have more of a commitment in getting to the students than do college teachers.

"Academic freedom" is too often a euphemism for sloppy pedagogy.

CHANGE IN THE SMALL PRIVATE COLLEGE

W. Burkette Raper, President
Mount Olive College, North Carolina

At this conference we have talked much about the process of change, the techniques and technology in effecting change, and the methodology of change. We have discussed the role of the faculty, the role of the student personnel worker, and the role of the administration in bringing about change.

I want to suggest that the real focus for change must be centered upon the student as both the purpose for change and as an agent for change.

Roger L. Shin writes in The Educational Mission: "Even the best efforts usually fail if they move in the wrong direction. When the mighty fortress of Singapore fell in 1942, the biggest reason was a simple one: the huge guns set in permanent implacement all pointed out to sea. The battle plans assumed that the target would be a naval fleet. When the attack came from the jungle in the rear, the fortifications were useless. The guns were powerful but they faced the wrong direction.

"Education is also likely to fail if it misunderstands its purpose. It needs to be clear about its direction, hence, the most persistent question facing Christian educators is a short and simple one, 'What are we trying to do?'"

From what, to what, and for what are we seeking changes are the questions we need to keep foremost in our thinking. Our goal is to discover how we can most highly motivate, most effectively assist our students to become the kinds of persons and to develop the competencies to which they and our colleges are committed.

The most effective force for change in higher education today is the student, and in planning change it is important that we have the assistance of students in identifying areas in which change is needed, and in formulating and implementing change. In bringing about desirable change, our professional reputations are at stake, but the lives and destinies of students are also at stake.

Change at Mount Olive College

Let me share with you one means we have found at Mount Olive College to effect changes. Last year we held two off-campus retreats, one on student life and another on religious life, to which we invited students, representatives from the faculty, administration and governing board. On these occasions we divested ourselves from our official roles and sought to understand each other as persons. The

best description of these retreats was expressed by the President of the Student Government Association who called them "the pathway to understanding."

Many recommendations for changes emerged from these retreats, and perhaps no experiences at Mount Olive College have produced more far-reaching changes. A major reshaping of our programs in student and religious life is now taking place in a peaceful and constructive atmosphere.

We are now considering a retreat at which we will focus on the area of academic life, and we will probably invite alumni as well as persons from the campus.

Among the advantages of the retreats were the following:

1. These retreats are highly effective for the small college because a limited number of leaders can represent and transmit back to the entire student body ideas for change and improvements.
2. They provide for <u>participation</u> by students in the process of effecting change. This participation is a part of the student's education. It introduces him to a self-perpetuating educational process. The tragedy of so much education is that it ends when the student leaves the campus.
3. It is a "cooperative approach" to effecting change. Teachers are sensing the need for change from the students, not the administration.

<u>Education, A Human Experience</u>

Education is basically a human experience, not a technological process. The greatest educational force we have discovered is the impact of one person upon another person. The greatest value of technological media is that they can extend and enforce, but not substitute for, the impact of a master teacher upon his pupils. Modern media are no better than what they communicate.

It is of the highest importance that we view students as <u>persons</u> to be developed and not as <u>objects</u> to be informed.

I am told that on the welcome sign to Jamestown, Tennessee, the Jaycees have written: "Young Men Can Change the World." Indeed they can, and in education our goal is to bring about those changes that will enrich and fulfill human life.

U S O E A N D T H E D E V E L O P I N G J U N I O R C O L L E G E S

General Session

David W. Smith, Jr., (Chairman)
U. S. Office of Education

It is always a pleasure to talk with you about our activities in the U. S. Office of Education because it is, to me, a very challenging and interesting task. I think that over the past year and a half, we've been very fortunate in most of our confrontations to work through the problems and projects which have been extremely beneficial to your institutions, to your faculties, and to the general educational picture of the country as a whole.

I think that the topic of this conference, as far as it has to do with change and innovation, is fitting when we think of the Title III Program With Developing Institutions. When we consider the situation a little over a year ago at the Airlie House Conference, and many of you were present, and when we think of the expectations of the U. S. Office of Education and the expectations for the program held by AAJC, we realize that we have moved quite far in the direction of change and innovation.

If you think what happened in your individual case in the past 13 or 14 months and what has happened to the program as a whole, you know that it has been very innovative and it has changed. We feel that all of these changes have indeed been positive and productive. As a result, we have a few battle scars. It hasn't been the easiest road, but change never is. We even had a few changes of attitude within our own division in the U. S. Office of Education. I think for the community college and the private junior college activity and for the Office of Education, perhaps the most outstanding incident was the AAJC conference in Atlanta. Many of you were present there and heard Dr. Paul Carnell talk about the aspirations of the Office of Education for community and private colleges. It was a revelation to everyone, including Dr. Carnell, by the time it was over. You are also aware of the confrontation that took place afterward. Observers of the junior college program charged that the Office of Education wasn't doing enough. These charges were indeed true. But the Office of Education, sort of red-faced, has stood up to the challenge and has started to do something about community colleges, about the community college movement, and the impending legislation.

Jack Orcutt was brought into the staff and put to work and we now have within the Office of Education a great amount of interest created by this activity with some expectation of accomplishments. While we are waiting for Congress to react to the several bits of legislation, we want to be very realistic about it. We are going to wait for some time, but we feel, and this comes from some of the most pessimistic in our group, that something will happen within the next few years that will materially help the two-year college movement and that the Office of

Education will be prepared to administer the types of programs that may be created. The important thing is that there is an awareness and a sensitivity from the commissioner's office on down, even from the Title III staff, of the importance of the two-year college movement in the country.

Now I have asked Jack, as a result of his heavy exposure to the Office of Education's thinking and his previous activity, to prepare some notes and make a few remarks about the variety of the programs which not only now are available for two-year colleges, but which we can anticipate will become available in the next 24 months.

U S O E A N D T H E D E V E L O P I N G J U N I O R C O L L E G E

a summary of a discussion led by

John Orcutt, Junior College Specialist
Division of College Support, Bureau of Higher Education
United States Office of Education

As you know this year's Program With Developing Institutions has been funded through eight regional coordinating colleges. The regional coordinators will have greater budgetary and planning control than last year's regional coordinators. The 53 individual colleges in the program will also have a greater responsibility in planning and implementing this year's program for their own institutions.

AAJC will perform more of a service than a coordinating function.

It is important to use the data gathered in last year's program to help identify the priority areas to be considered this year. Indeed, this year's focus on faculty development is a result of the pressing need to attack this problem, as was identified in the work that the Program With Developing Institutions did with the 85 colleges in the 1968-69 Program.

Let us now discuss Title III of the Higher Education Act--Strengthening Developing Institutions--in broader terms than the PWDI. Title III gives the Federal Government the opportunity to assist an institution in many different ways. Many colleges are concerned about how they should write proposals so that they might receive positive consideration under Title III or any other legislation. Let me refer you to an article in the March 1968 Junior College Journal by Dr. Calvin B. T. Lee entitled "Why Requests for Federal Aid Are Rejected," which I believe to be an excellent resource when a college wishes to benefit from Federal funding. Let me refer you also to two other documents which are also helpful in understanding how an institution relates to various Federal programs. They are the "Catalog of Federal Domestic Assistance" published by the Office of Economic Opportunity and "A Compilation of Federal Education Laws" published by the House of Representatives.

(Editor's note: Since this discussion took place, the Junior College Journal has published in its September 1969 issue a summary of the 58 Office of Education programs which provide for direct or indirect support for junior colleges.)

My function in the U. S. Office of Education's Division of College Support in the Bureau of Higher Education is primarily to work with the four programs that are administered by this division. These programs are Title III of the Higher Education Act--Strengthening Developing Institutions; Part E of the Education Professions Development Act (training of personnel for higher education); Cooperative Education (Title IV-D of the Higher Education Amendments of 1968), and Networks for Knowledge(Title VIII of the HEA Amendments of 1968). Since you are all familiar with Title III, let me take a moment to discuss the other programs.

The guidelines for Part E of EPDA specify that the training of junior college personnel is one of the national priorities under this title. I hope that junior colleges will be able to clearly identify their training needs and present meaningful proposals to USOE for consideration. Cooperative Education and Networks for Knowledge are new programs and the Congress has not yet taken positive action on the appropriations for these programs. I refer you to the actual enabling legislation for these programs for a better understanding of their purpose. (See "Compilation of Federal Education Laws.")

Let me close by emphasizing that we in the Federal Government are very willing to spend whatever time is necessary to work with each and every one of you so that you may better understand and take advantage of Federal programs. Please feel free to call on me either in person or by telephone whenever you have a question that you feel that I might be able to answer.

HOW DO YOU TURN A STUDENT ON?

Panel Discussion

Joseph Fordyce, Chairman
President, Santa Fe Junior College, Florida

Santa Fe Junior College began with two major concepts that hopefully dictated all of the policies and procedures that have developed in the short history of this institution. The first of these concepts was that Santa Fe is dedicated to learning and, therefore, its faculty is primarily concerned with that kind of teaching that will best promote the learning process. The second major concept was that Santa Fe is an open-door college. This means that admission is unlimited for high school graduates and other adults of the community.

Santa Fe was dedicated from the beginning to the concept that this open-door admissions policy should not be a "revolving door" policy. The college was and remains convinced that, given reasonable learning conditions, adults in our society can continue to learn in ways that are meaningful for them. In other words, the college believed that the learning experience could be a successful experience for all who wish to devote their minds and energies to it.

The depths of human ability have scarcely been plumbed, and the college, through its teaching and support services, is dedicated to the belief that learning is primarily a matter of the release of this great educational potential. Based upon these beliefs and values, the college from the beginning determined to examine all of the traditional and historic trappings of education to determine if they were indeed conducive to learning or if, on the other hand, they might actually be inhibiting. The college determined that all artificial barriers to the learning process should be removed if it were possible to do so.

The college therefore, has established a number of practices and procedures, which have included:

1. The establishment of a common pattern of courses, basically designed as orientation to college and to the various fields of knowledge and of occupations;

2. Grading practices that de-emphasize the time concept in learning and emphasize the opportunity for success;

3. The involvement of a high quantitative level of professional counseling, closely integrated with more formal instructional practices;

4. The program of student activities based upon the determination of their roles in the accomplishment of college objectives;

5. The establishment of objectives for the college in terms of desired change in student behavior. These objectives are to help each individual as he becomes increasingly familiar with the knowledge of the world to:

   a. Understand his biological and physical environment and his own interactions to it.

   b. Maintain good mental and physical health for himself, his family, and his community.

   c. Develop sound moral and spiritual values.

   d. Understand his cultural heritage so that he may gain perspective of his time and place in the world.

   e. Exercise privileges and responsibilities of citizenship.

   f. Develop rewarding personal and social patterns of life in home and community.

   g. Achieve optimum vocational adjustment.

   h. Develop creativity and appreciation for creativity of others.

These objectives were thoughtfully adopted by a small group of program developers and later reinforced by careful study of the faculty as most appropriate to a platform that had been earlier developed and accepted, which we refer to as Eight Points of Commitment:

1. The student is the central focus for the process of learning.

2. Teaching occurs only when students learn.

3. Effective educational experiences will modify human behavior in a positive manner.

4. All human beings are motivated to achieve that which they believe is good.

5. Education should be an exciting, creative, and rewarding experience for the student and for the teacher.

6. All human beings have worth, dignity, and potential.

7. Experimentation and innovation are reflections of attitudes; when they are translated into practice, the process of education can be significantly advanced.

8. Traditional concepts of education (the lecture, the 30-student class, the 50-minute period, the textbook, etc.) are suspect and in need of careful trial and evaluation to a degree at least equal to, and perhaps more than, new and innovative practices.

THE STUDENTS WERE TURNED ON

Clifton R. Jones
Director, AAJC Social Science Demonstration Project

(Editor's note: The following includes selected excerpts from Dr. Jones' text, the complete version having appeared as the feature article in the PWDI Newsletter #42. A final report by Dr. Jones on the AAJC Social Science Demonstration Project is forthcoming.)

Many students enroll in courses in sociology, especially in the introductory courses, with enthusiasm and great expectations. However, in a very short time their enthusiasm wanes. The major complaints of students are (1) that sociology is too abstract, and (2) that they see little relationship between sociological theory and concrete reality. If the latter criticism is put in more current language, students say that sociology, as it is taught, is not "relevant."

There are several explanations for student attitudes toward the discipline: (1) Students enroll in courses in sociology with a misconception of the discipline. An overwhelming majority associate sociology either with social work or with the "discussion" of social problems, or both. Because, historically, sociology has been associated with these phenomena in the popular mind, students expect that this is the content with which they will deal. (2) Students enroll in courses in sociology seeking solutions to social problems, and are disappointed when they do not find them.

This project was essentially an experiment in teaching sociology to junior college students using the field survey method as a teaching device, and in using the community as a laboratory. Its purpose was three-fold: (1) to vitalize the social science teaching program (the method is applicable to the other social sciences as well as to sociology); (2) to provide for students the opportunity to actually apply the scientific method to the critical study of a current social problem in their community; and (3) to gather useful information on pressing issues, such as racial tensions, which can be of value in forming public policy for the community.

To achieve these purposes, we took groups of sociology students out of the traditional classroom pattern and put them into the field of social research. The students helped to design a part of the questionnaire, pretested it, participated in the sampling procedure, did the interviewing under the instructor's supervision, and helped to tabulate and analyze the results. In short, the students were brought into direct contact with the objective survey approach to the study of society and one of its problems.

The Social Science Demonstration Project of the American Association of Junior Colleges was funded by the National Endowment for

the Humanities in the amount of $50,405. Ten public junior and community colleges were selected to participate in the project. The colleges were selected on a regional basis, and for the most part middle-sized cities (250,000 - 999,000) were selected for the experiment rather than major metropolitan centers. The institutions chosen to participate in the project were as follows:

American River College (Sacramento, California)
Arapahoe Junior College (Denver area, Colorado)
Bristol Community College (Fall River, Massachusetts)
Community College of Philadelphia
Metropolitan Junior College (Kansas City, Missouri)
Miami-Dade Junior College (Miami, Florida)
Montgomery Junior College (Maryland suburban area to Washington, D.C.)
Orchard Ridge Community College (Michigan)
Seattle Community College
Tarrant County Junior College (Fort Worth, Texas)

Each faculty member who participated in the project did so voluntarily and enthusiastically and the contribution of these faculty personnel to the success of the project cannot be overemphasized. The vast majority of the 1200 students who participated in the project were freshmen; none was more advanced than sophomore standing. All were junior college students. Almost all were enrolled in the introductory course in sociology.

The problem which was chosen for investigation was that of racial tension, primarily because racial tensions commanded the attention of most Americans, both black and white during the fall and summer months of 1968. The riots which had plagued the nation each summer since 1965, the assassination of Dr. Martin Luther King, Jr., in April of 1968, followed by violence in a number of cities, had racial overtones. Moreover, the amount of time devoted to its discussion on television and radio, particularly following the Report of the National Advisory Commission on Civil Disorders, was evidence that racial tensions were a matter of grave concern to Americans. Critical data on the problem, locally and nationally, would be valuable.

From the very beginning it was emphasized that this project was to be an integral part of the course rather than a substitute for it. But in all except two cases, three weeks or more were spent on the project. Each participant was permitted to add questions which would reveal attitudes and opinions more relevant to the local situation.

In each community involved in the project, the procedures were publicized through the local press, radio and television. Full cooperation was obtained from the police and other city officials, while the students were conducting the interviews. The period of interviewing was publicly announced, and each student had a badge of identification while he, or she, was interviewing. These 1200 students collected more than 6000 interviews, the data from which, when analyzed, will constitute a monograph on racial tensions in ten American cities and towns.

The basic purpose of the project was to develop in the students an increased knowledge of and an appreciation for sociology as an academic discipline through the actual use of the scientific method. Time did not permit "scientific" measurement of the kinds and amount of learning that took place. Hence we must depend largely on the subjective observations of faculty and students on how much learning took place. While these observations are less reliable than more critical measurements, we do not have to rely on them completely. We know that students gained some knowledge and acquired certain skills which they would not have gained through traditional methods of teaching. These may be listed as follows:

1) Students learned through actual experience to identify the components of a problem selected for scientific research. Although the problem was chosen in advance, skillful simulation of the situation by the faculty member in charge acquainted them with the process by which problems are identified and precisely stated. In discussions of the questionnaire, students were critical of the hypotheses implied.

2) Students learned through actual experience how to construct a questionnaire. Although the basic instrument was prepared for them, since each institution could add questions related to the local situation, the added questions were formulated by the students themselves. They learned the logic of framing questions in a specific way in order to obtain specific responses.

3) They learned the techniques of coding.

4) Some learned how to use a key punch machine and how to read IBM cards.

5) Most acquired some familiarity with computers.

6) All acquired some knowledge of data analysis.

7) The students acquired additional skills in writing. While their written reports of their findings were crude, judged by professional standards, at least their efforts weren't contaminated with the plagiarism that characterizes the usual book report or term paper.

8) Each student who participated acquired some skill in interviewing. Since a great deal of sociological research employs this technique, this must be regarded as a most important and valuable experience.

9) Experience in the project was not limited to sociology students. Students in other fields also profited from the experience.

10) The project helped to develop a stronger relationship with the community. It also provided a service to the community which, in turn, enhanced the image of the institution in the community.

The emphasis here was on the scientific study of a social problem. It needs to be pointed out that the subject matter of sociology consists of far more than the social problems. A distinction should be made between social problems and sociological problems; the latter are certainly a legitimate area of scientific inquiry.

While this technique is no panacea, there is every evidence that its use vitalizes the teaching of sociology immeasurably. The students involved found that sociology is really "relevant" and they were "turned on" about it through this type of field survey.

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PANEL DISCUSSION

Ann Ackourey

Director, Division of Humanities
Miami-Dade Junior College (Florida)

The A.A.J.C. Social Science Project at Miami-Dade Junior College had two objectives: to get student involvement in sociological research and to create a better understanding of blacks and whites in the community. In general, the students felt their participation was exciting and challenging and should be a regular part of at least one sociology course.

The Miami experiment, I would say, is indicative of the fact that more consideration needs to be given to teaching that which is relevant to today's junior college student. I think it has been implied here that this is the generation of relevance. The three R's, if you will, are Reading, Reasoning and Responding. Today's junior college "Joe" is interested in the Viet Nam War, world poverty, the ghetto and even the rhetoric of politics. Phil Jacobs, in his book, "Changing Values in College," thinks that today's college student is no longer taken in by the competitive security mania that once affected many of us in our earlier college days.

Involvement -- community involvement -- is the "tour de force" behind today's junior college student. In fact, many industries and other professions are taking cognizance of this fact. Some top-ranking law firms located in Manhattan, for instance, are sending out their associates to work in the ghetto one night a week, then having them come back and do some follow-up the following day. Jim Martin, who is the editor of the "Law Review," states in a recent issue that today's junior college student needs to be exposed to the world outside, because, after all, when he is finished with his education, that's exactly where he is going to light. If these indeed are the characteristics of today's junior college student, and the trends are as they are, the question arises, "What are some other means of community involvement that might be used in junior colleges or are being used that we very well might be able to apply in our own local situation?"

In response to this need for community involvement, colleges have inaugurated various courses such as the history summer tour at Earlham College, Richmond, Virginia; educational psychology and stimulus films at Indiana University; student involvement in subcultures at Boston University; and portal-to-portal learning at the State University of New York Agricultural and Technical College.

Suggested guidelines for innovations and for "turning on" a student include:

1) Re-examine all instruction for meaning and relevance to the real world of the student.
2) Not only permit but encourage the student to work on more real social problems and to experience them directly.
3) Place more responsibility for his own learning on the student, and assign less busywork.
4) Administrators and teachers must be open to innovations for involving students in educational and community enterprises.

In conclusion, I would like to say that I feel that today's student really does need new styles, new appetites, if you will, and new dimensions.

Selected Bibliography
Student-Community Involvement in Junior College Classes
(Submitted by Ann Ackourey)

Anderson, Bernice E. Nursing Education in Community Junior Colleges. Philadelphia. J. B. Lippincott. 1966.

Cuninggim, M. "University's Third Function." Christian Scholar 50:40-7, Spring 1967.

Fields, Ralph R. The Community College Movement. New York. McGraw Hill. 1962. pp. 82-3.

Fusco, R. A. "[illegible]plemental Health Education Experiences in College Health Courses." [illegible]f School Health 37:526-7, Dec. 1967.

Green, K. L. [illegible]ural Environment Awareness: Using Urban Resources." American Biology Teacher 29:641-5, November 1967.

Grindeland, W. D. and D. R. Thompson. "The Community Can Be Your Classroom." Educational Screen AV Guide 47:26-7, March 1968.

Johnson, B. Lamar, ed. New Directions for Instruction in the Junior College. Los Angeles. University of California. 1965. pp. 33, 35-7.

Koester, S. "Chicago City College: A Center for Innovation." Junior College Journal 39:23-4, March 1969

Lacattiva, C. A. "Selected Supervisory Practices in the Use of Community Resources." Journal of Educational Research 60:139-41, November 1966

National Society for the Study of Education. The Public Junior College: the Fifty-Fifth Yearbook of the National Society for the Study of Education. Chicago. University of Chicago Press. 1956. pp. 144-9

Seitz, J. E. "Community Oriented Curricula." School and Community 54:14, April 1968.

Weatherford, J. A. "Innovations in Distributive Education; Using Community Resources." Business Education Forum 21:11-13, April 1967.

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James Kiser, Dean of Student Services
Central Piedmont Community College, North Carolina

"How do you turn a student on?" In many of our colleges, we have the most heterogeneous groups of students that it is possible to assemble; consequently, the question itself will have many different interpretations as well as many different responses. Not being willing, then, to speculate on this question, it only seemed logical for me to take it to my "laboratory"--the students themselves. A questionnaire having three questions was prepared:

1. What in your opinion does this question mean?
2. Based on your interpretation of this question, what does it usually take to "turn you on?"
3. What should the college do to aid in the process of turning students on?

Let me hasten to say for the benefit of researchers that this is not an example of scientific, controlled research.

Representative answers were as follows:

1. What in your opinion does this question mean? ("How do you turn a student on?") Answers by the students were:

-What can be done to get the student interested in activities of the college?
-How to get students to respond to adults in an honest and serious manner.
-How do you bridge the generation and communications gap between faculty, administration and students?
-How to get the student to think for himself; to get involved with life on his own and not be pushed into it.
-How to make him feel "cool" -- only let him think he is doing it without help.
-How to motivate a student to mature and better his education

2. Based on your interpretation of this question, what does it usually take to "turn you on?" Answers:

-Something that really strikes my interest.
-Affairs and activities that will make me want to stay on campus after classes.

-Helping organize and discharge extra activities.
-Becoming enthusiastic as a result of helping plan some program as an important member of the group.
-Affairs that are of me -- in which I want to become involved.
-My wife. (This demonstrates again the diverse student population that we have in the community college and many people attending this conference are experiencing this same diversity -- ages, marital status, cultural backgrounds, scholastic abilities, interests, and attitudes.)

3. What should the college do to aid in the process of turning students on? Answers:

-Let students know what is going on at the college at all times -- being sure that students are aware of all functions no matter how big or small.
-Ask students to pitch in and help on any aspect of the college functioning that needs assistance because students like to be asked for help in order to get a feeling of involvement.
-Foster activities that will bring students back on the campus so as to help stop the mass exodus from campus when classes are over. (This is a problem particularly at commuting institutions.)
-Let students be responsible for their own projects, not only small things, but the important things; and if feasible, let them have a part in course planning. Students need to develop their sense of responsibility. Let them be innovative and let them fall on their faces a few times. (This is an important admonition.)
-Support students in their projects. They want your leadership and guidance.
-Start a marriage service -- students could drop-in, turn-on, and get married.

It is interesting to note that in the midst of the diversity of students a consensus still emerges. Students as a group yearn for opportunities which enable them to exercise <u>responsible</u> participation and leadership in the affairs of their college. They also want instructors and administrators to join them in this task -- to support them and even lead and guide them. In other words, we must get off our own "clouds" and join students on theirs.

In spite of the need for change, which is the tenor of this conference, the campus as we now know it and many classes as we currently know them will continue to be with us for a long time. It is our commitment, however, in the junior college to concern ourselves with the <u>total</u> development of each student realizing that classes are only a part of the process. As Harold Grant, a young shining light in student personnel services from Michigan State says, "Everything that goes on on campus should be the classroom and everything that goes on in the community should be in the curriculum."

L E T ' S S T A R T O V E R !

Dinner Address

Glenn Gooder, President
Los Angeles City College

I have mixed feelings about my situation tonight. At this point I am terribly self-conscious about my role.

Dr. Ofiesh has undermined my confidence in my medium. I had planned to lecture -- here I am 2000 miles from home with no cameras, no slides, no pictures, no projectors, no recorders, no tapes, no computers -- stuck with my manuscript.

Dr. McClelland and the panel following his remarks have undermined my confidence in my message. You will recall that he listed eight conditions under which innovations are likely to succeed. Then Galen Drewry reminded us that "all of education is a change process," and I couldn't help thinking we may be talking about the wrong thing again. We should be talking about <u>the product</u> and here we are talking about <u>the process</u>.

As if that weren't enough, Dr. Seidlin has undermined my confidence in my material. I have no funny stories, and little inclination to tell them if I had them. I intend to say, "We live in a world of change."

I might at this point be described as a practicing optimist being overtaken by the lengthening shadows of pessimism. This may be the result of approaching old age. It may be the result of the inevitable drain of physical and emotional resources which comes from serving as a buffer between opposing forces on a large, urban community college campus. It may be the result of a loss of perspective after too many years in the trenches. On the other had, there is increasing evidence that pessimism is the more realistic attitude to bring to our condition and to our time.

Now I hadn't planned to do this, because I know you are tired and I hadn't planned to tell you my troubles, but several people have asked me about things that are going on on our campus, so I will share a few of them with you for what it's worth. I come to this part of the country and I think, maybe, I'm seeing two different worlds.

At Los Angeles City College we have 19,000 students, day and night, we have 57 junior occupational curricula, we live in an urban center; we like to think it is one of the most advanced cities in the world and yet in the summer of 1965, as you will recall, there wasn't a place within miles of that city that you couldn't walk without the fear of being shot because of the Watts riots. Many things are going on in this city and I hope that not many of them will come here.

But the community colleges do not exist and cannot function in a vacuum, and as things happen at Berkeley, as things happen at Cornell, as things happen at Harvard, at San Francisco State, and at San Fernando Valley State, the temperature rises.

When a local junior high school has an uprising and people are hurt and the police have to come in to put it down, when two young students are injured at the high school and rumors get started throughout the town that these students have been murdered by the police and three days of rioting result, we are affected We have on our campus the SDS and the BSU and we are threatened next year with a racial crisis. I don't mean to bore you with my problems, but I believe these are your problems as well. The one thing I have liked about this conference is that nobody talked about these things. I don't want to ruin your evening but some people have asked me to mention these things. We have had confrontations; I consider myself to be somewhat of an expert on confrontations. And you are going to have confrontations. I'm convinced you are going to have them, and I think you ought to be concerned about it. I think that the first thing we have to do is to listen to and understand our students. I don't think we know how to do that.

I think that there are five kinds of students and I think we ought to know what they are as most people try to generalize about these kinds of students and therefore misunderstand them. First of all there is the large number of students in the apathetic majority. Secondly, there is also a very important minority of students. These are concerned students, able and articulate students, who want us to change. They are going to insist that we change and when they can't get change through legitimate channels, they are going to join other forces with whom we hope they will not work. The third group of students are what we would call the dissatisfied minority students. We can still work with some of them, with some of them we cannot, and we have to listen to them very carefully. There is a fourth group of students that we have to be most concerned about. This is the group of students I would call the out-and-out revolutionaries, or anarchists, and we must certainly not misunderstand the message they are giving. The last group of students are what I would call hoodlums, gangsters, and the emotionally unstable. I mention all this because this is the sort of thing I am concerned with all day long and I didn't want you to have such a nice conference without worrying about some of these things.

There was a panel this afternoon on "How to Turn Students On." My problem, in many cases, is how do you turn them off -- at least a few of them? Thus my pessimism. And it is not encouraging to review the growing pessimism of others.

Archibald MacLeish wrote recently of our times:

> "There is, in truth, a terror in the world, and the arts have heard it as they always do. Under the hum of the miraculous machines and the ceaseless publications of the brilliant

> scientists a silence waits and listens and is heard. It is the silence of apprehension. We do not trust our times, and the reason we do not trust our times is because it is we who have made the time, and we do not trust ourselves. We have played the heroes' part, mastered the monsters, accomplished the labors, become gods -- and we do not trust ourselves as gods. We know what we are." (MacLeish, Archibald, "When We Are Gods," Saturday Review, Oct. 14, 1967, p. 22.)

For his newspaper column of June 11, 1968, after the assassination of Robert Kennedy, Art Buchwald wrote of our time:

> "...to the rest of the world the United States must look like a giant insane asylum where the inmates have taken over. The guards are gone, the doors are open and everyone thinks the other person is sick.
>
> "Except for the charity ward where the people are all shoved together on top of each other, the rest of the asylum couldn't look prettier. The buildings are all new and shiny, the equipment is the most modern in the world, the grounds are green and decorated with flowers. To look at it from the outside you would think it is the ideal spot on the globe."

Buchwald concludes by writing:

> "Nobody knows how many more doctors the patients will shoot, nor how long the asylum will survive before the inmates destroy it once and for all."

I am still optimistic enough to believe that the asylum will not be destroyed -- that it will survive and, once again, become a hospital to heal men and to make them free. However, before that can happen, each of us must realize that we are patients and we must begin to heal ourselves. Not much has occured since last June to restore our confidence or to make us optimistic.

Frustration and fear continue to grow in our country creating, in turn, a chain reaction of suspicion, distrust, hate, and finally violence. Some of our frustration grows out of the fact that for many Americans the promise of freedom and personal dignity remains unfulfilled. Some is the natural result of accelerating social change. Some comes from our inability to match brilliant advances in science with equally dramatic solutions to human problems. Some is generated by those who have no concern for our way of life and, in fact, hope to destroy it.

Our fears, of course, are the result of dangers, some of which are real but many of which are imagined. This is not the time to explore the many sources of our fears but certainly, it is a matter of major priority for this nation to reach some sensible conclusions about which of our fears are real and which are imagined.

In spite of our efforts to relieve frustration and to reduce fear through the extension of knowledge and understanding, the chain reaction continues and grows and hate and violence become more and more common. Part of the problem is that we react to the symptoms of hate and treat the symptoms of violence without, at the same time, giving adequate attention to the basic causes--frustration and fear.

A great and gifted teacher, Dr. Earl Pullias of the University of Southern California, addressed himself to the uncertainty of our times when he said to the professional staff of the Los Angeles County Schools in 1967:

> "These violent upheavals may be the death pangs of a civilization, and even of man; or they may be the birth pangs of a bright new day for men. They are, perhaps something of both..."

This then is where we are. This is our time. It is a time of frustration and fear, of turbulence and turmoil, and for some, a time of terror. It may be the end of a civilization. It may be the time of a bright new day for man. Hopefully, each of us may still have some influence upon which it is to be. Hopefully, the community college may still be flexible and adaptable enough to make a significant and positive difference in the direction our nation takes at this time. Hopefully, it is still possible to be an optimist.

An optimist might still function in this time if he could be encouraged about his own enterprise and its potential for rolling back the shadows of pessimism. This is not the first "restless" age nor is it yet the most violent in terms of local expressions of unrest. It still may be possible to be truly relevant to the future and to our students. We may yet come to see and to help our students to see the future for what it will be. In this our students may be wiser than we. Perhaps, for example, our students are more accurate than we imagine when they tell us that they already live in a world very different from the world we have known.

Reports such as "Speculation: Los Angeles--1958," a working paper for the Los Angeles Goals Program have reminded us that the following "things" had little or no influence upon the daily lives of the citizens of Los Angeles in 1950: television, computers, freeways, "new math," oral contraceptives, jet transportation, the Head-Start program, Medicare, nuclear power generators, polio vaccine, artificial hearts, lungs, and kidneys, communication satillites, frozen foods, credit cards, retirement communities for the aged, LSD, document copy machines, the electronics and aerospace industry, and the teen-age market. That same report reminded us that some elements of city left have not changed or have changed very little since 1950 including: ghettos, school systems, and city government.

Perhaps, our students are wiser than we are willing to admit when they tell us that new dimensions of change are related to the quality of life for individual people, that these new dimensions must become the prime concern of education, and that we must turn our attention to those dimensions on behalf of our students.

Among the more important dimensions of change is the urban dimension. Thousands of poor, disenfrenchised, unemployed and unemployable Americans are moving to the large urban centers in search of a better life. Unfortunately, they are not finding life better in the cities. They are, in fact, finding it worse and their frustration deepens. An optimist would like to believe that there is still time to help students prepare to cope with urban blight and its devastating impact upon people.

A second dimension--the most tragic--the one which above all threatens to destroy us should have ceased to be a problem long ago. That is the racial dimension. Whether or not we agree with the general conclusions of the Report of the National Advisory Commission on Civil Disorders, it would be a grave--perhaps fatal--error to overlook the facts upon which the conclusions are based and to refuse to correct the conditions which have led to the terrible frustrations reported. Unfortunately, some are trying to cure one kind of insanity with another. There is no hope in that. However, the major minorities of this country are demanding a new relationship in this society and they will not be denied. An optimist would like to believe that there is still time to help students prepare to cope with the terribly destructive cross-currents of racial strife.

A dimension of change which cannot be overlooked is the technological dimension. Human beings have circled the moon and are programmed to land on the moon next month. Human organs are transplanted with increasing frequency. It is now theoretically possible, according to the distinguished biologist, Dr. James Bonner, to replicate human beings. Science and technology have brought us untold benefits and promise many more, but we are paying an already intolerable price and the price, like interest rates, is rising. The price is the destruction of the beauty of our habitat, the poisoning of the air and water which supports human life, and an increasingly impersonal and inhumane human experience which threatens to make man the servant rather than the master of his technology. An optimist would like to believe that there is still time to help students perpare to cope with the imbalance between mechanization and humanization.

Another major dimension of change is communications. It appears that mass communications media may be reducing rather than increasing our ability to communicate with one another. The medium may indeed, be the message. We accept or reject what we see and hear on an emotional level with little thought for how the message originated or how it was motivated. The media have separated speaker and listener or viewer. The individual citizen has little opportunity to speak back, to temper, or to influence the thinking of those who speak to him. He is removed, cut off. His knowledge, his vision, his understanding are limited to what the editor decides he should see and hear. In spite of all this, you and I labor under the tragic delusion that we are educating the people of this country. An optimist would like to believe that there is still time to help students cope with impediments to true communication.

We haven't even mentioned the dimensions of changing values. That would be another whole topic.

This, then, is where we must be. We must come to understand the nature of the changes going on around us. We must focus our educational enterprise upon the implications of those changes and we must prepare our students to cope with those changes.

We come now to a very basic and critical question. Can we get from where we are to where we must be? The answer will depend upon whether the question is put to a pessimist or an optimist. I used to answer the question with a firm and confident "yes." Today, my answer would have to be"maybe." I see little to support a resounding and confident "yes." I see a growing division between the colleges and the communities which support them. I see a growing rigidity in opinions about the basic issues of our time. I see an increasing reluctance for individuals or groups to apply reason, to exercise restraint, and to assume responsibility in attacking our mutual problems.

The Commission on Higher Education of the California Teachers Association has tried to prepare a position paper describing the division between college and community and to suggest guidelines for a dialogue to restore an environment of mutual trust and confidence. I am not confident that we will be able, in California at least, to follow those guidelines. Hopefully, we may. The Commission has suggested that the citizens of California must be prepared to bring to that dialogue:

"1) An understanding that the 'crisis on the campus' is more than an 'educational' problem; that it is a social problem with deep and pervasive implications for all of society, 2) A recognition of the disparity of conditions and circumstances within which the people of California live and learn, 3) A recognition that individual fulfillment is the primary goal of this democracy, 4) A commitment to provide the resources to meet the current crisis and to prevent further crises, 5) A willingness to review priorities in public service and to bring meaningful tax reform in order to support programs in accordance with new and appropriate priorities, and 6) A resolve to protect society and the academic community from the forces of tyranny as well as from the forces of anarchy." (From an unpublished position paper of the Commission on Higher Education of the California Teachers Commission.)

The Commission has suggested that the educators of California must be prepared to bring to that dialogue:

"1) An objective analysis and description of the forces at work in society and on the campus, 2) The courage to admit and the determination to eliminate present weaknesses in higher education, 3) The confidence to defend and to extend present strengths in higher education, 4) A willingness to put professional responsibility above professional privilege, 5) A determination to protect the rights of faculty and students to pursue truth and to criticize society within legal and rational limits and an equal determination to prevent faculty and students from going beyond rational pursuit of truth, responsible criticism of society, and legal expression of dissent, and 6) A commitment to provide relevant educational programs within responsive institutions." From

an unpublished position paper of the Commission on Higher Education of the California Teachers Association.)

The citizens of my state and the educators of my state may not bring these attitudes and understandings to a dialogue on our problems. They may not even bring themselves to such a dialogue. If not, it may not be possible, in our case, to get from where we are to where we must be. Even so, an optimist still dares to ask a second basic question. How do we get from where we are to where we must be? That is the question to which we must address ourselves tonight and for the foreseeable future. I have several suggestions, all of which grow out of a basic admonition. That admonition is: Let's Start Over. Let's start over, not with new objectives but with a new strategy for achieving the objectives we have stated again and again. Let's start over with the objective of becoming truly the college of the individual and the college of the community. Let's start over with a firm resolution to reduce frustration and fear and to prepare our students to live in and build communities prepared to cope with the dimensions of change occuring around them. Above all, let's start over with a strategy based upon the assurance of clear vision.

I do not pretend to understand much that Marshall McLuhan has written, but one point he has made is very clear. In Understanding Media: The Extension of Man, McLuhan wrote:

> "When IBM discovered that it was not in the business of making office equipment, but that it was in the business of processing information, then it began to navigate with clear vision." (McLuhan, Marshall, Understanding Media: The Extension of Man, Signet, 1964, p.24.)

It is apparent to me that we do not navigate with clear vision because we have misunderstood our proper business. We are conducting a business devoted to disseminating information when we should be in the business of developing human potential. On this point we must not continue to delude ourselves. We must face the fact that we do not conduct our affairs as if we were in the business of developing human potential and that is our proper business.

In conducting our affairs we are too anxious to follow the pattern and the lead of other institutions of higher education. We persist in emulating their weaknesses at a time when they should be emulating our strengths. When we begin to navigate with clear vision, we will declare our independence of traditional procedures in higher education and we will refuse to be bound by the models of other institutions. We will get back to the basics which are people and their potential for growth. We will revolutionize our enterprise as the computer has revolutionized the processing of information.

When we begin to navigate with clear vision, students not subject matter, will be central to our business. Students will be accepted in our colleges for what they are and for what they may be. No one will be turned away with the admonition to return when he is well enough to take our medicine. We will prescribe medicine

for the illnesses he has, not for the illnesses we think he should have. Proper subject matter organization will no longer be a problem. We will organize around students, not subject matter.

We will help each person to diagnose his own strengths and weaknesses with total concern for his individuality and promise. We will extend our concept of guidance to include helping each student learn how to make critical decisions. We will assign learning experiences to students, not students to learning experiences. We will try to understand the implications for learning of the new synthesizing philosophy of the young which is "I feel, therefore I am." We will appreciate the significance of the drive for personal freedom and will embrace and encourage this drive as an aid to motivation for learning. We will encourage and make it possible for a student to set his own goals, proceed at his own rate, decide his own pattern of attendance in many areas of learning.

When we begin to navigate with clear vision, each student will be a participant rather than a recipient in our enterprise. We will understand that while much of the current unrest is generated by those who want to destroy the "establishment," much more is generated by those who simply want to be a part of the establishment so that they may help design its structure and help shape its future. We will respond to the deep concern of youth for ethical and theological issues. We will eliminate the need for experimental colleges outside of but adjacent to colleges and universities since relevant learning experiences inside the institution will be planned for each student.

We will implement what we already know about the significance of peer-group relationships and take advantage of this great resource. We will make use of the information coming from experiments like the one at Los Angeles City College in the use of students as counselors and counselor assistants. We will build on such information as that provided by Everett Wilson in a study in 1960 at Antioch College with fifty seniors. Wilson found that three-fourths of the changes these seniors regarded as significant in their growth in college were attributed by them to experiences other than their courses and professors. They listed as important to them: peer influences, direct experiences in the world around, responsibility-taking experiences in college affairs, and influences of teachers in non-course relations.

When we begin to navigate with clear vision, we will break the time barriers in education. We will adjust the time factor to fit the learning experience, not the learning experience to fit the time factor. We will not be bound by the school year, the semester, the quarter or the trimester except as they happen to be convenient for starting learning experiences. We will learn from places like Antioch where they have freed the freshman year of all traditional requirements that students are seeking shorter educational experiences. Experiences or three, four, and five weeks in length will become more common. I see that those of you working with John Roueche in the Regional Educational Laboratory for the Carolinas and Virginias already are working on the time barrier through your Instructional Improvement

system. As we free the learning experience, so will we free the learner from artificial time barriers. Students will learn at their own rate. Credit will be recorded as objectives are met not as dates occur. Learners will no longer be evaluated within time limits except as time is a factor in the behaviour being measured.

When we begin to navigate with clear vision, the measurement of the adequacy of education will be related more to life and less to subject matter. We will state the objectives of learning in terms of personal and professional competence, capacity to see relevance as well as to solve problems, and appreciation of that which is most excellent in what man thinks and does.

When we begin to navigate with clear vision, we will have real humility about the role our teaching and our education play in the failures as well as the successes of our students. We will examine the impact of the self-fulfilling prophecy upon our students.

In the April, 1968, issue of Scientific American, a well-known experiment which began in 1964 was discussed. The study was reported by Robert Rosenthal and Lenore F. Jackson. Teachers were told, very casually, that some of their students could be expected to "spurt ahead." Certain children were identified to the teachers as potential "spurters," but, as you know, they were really chosen at random from a cross-section of the students. Results of the experiment indicated strongly that children from whom the teacher expected greater intellectual gains showed such gains. This was especially true of the first and second grades.

Other interesting results were reported. At the end of the 1964-65 school year, the teachers were asked to describe the classroom behaviour of their students. The children from whom intellectual growth was expected tended to be seen by their teachers as more appealing, better adjusted, and more affectionate, and as less in need of social approval. An interesting contrast appeared when the teachers were asked to rate the undesignated children. Many of these children also had gained intellectually during the year. The more they had gained, the less favorably they were rated. (Rosenthal, Robert and Jackson, Lenore F., "Teacher Expectations For the Disadvantaged," Scientific American, Vol. 218, No. 1, April 1968.)

If we and our students are to be the victims of a "self-fulfilling prophecy," let's prophesy growth and success rather than failure.

Finally, for now, when we begin to navigate with clear vision, we will re-design and re-structure our learning environment so that those who are capable of learning do learn. Benjamin Bloom, Professor of Education at Chicago University, suggests a strategy for achieving this goal in a report entitled "Learning For Mastery."

Bloom referred to the self-fulfilling prophecy inherent in present grading practices based upon the concept of the normal distribution of grades. Then, he wrote:

"This set of expectations, which fixes the academic goals of teachers and students, is the most wasteful and destructive aspect of the present educational system. It reduces the aspirations of both teachers and students; it reduces motivation for learning in students; and it systematically destroys the ego and self-concept of a sizable group of students who are legally required to attend school for 10 to 12 years under conditions which are frustrating and humiliating year after year. The cost of this system in reducing opportunities for further learning and in alienating youth from both school and society is so great that no society can tolerate it for long.

"Most students (perhaps over 90%) can master what we have to teach them, and it is the task of instruction to find the means which will enable our students to master the subject under consideration. Our basic task is to determine what we mean by mastery of the subject and to search for the methods and materials which will enable the largest proportion of our students to attain such mastery." (Excerpted from "Learning for Mastery," a paper by Benjamin S. Bloom, Professor of Education, University of Chicago, published by Evaluation Comment, Vol. 1, No. 2, May, 1968.)

By now you may have concluded that I am too confused to be either an optimist or a pessimist. You may have concluded, also, that my projection of where we are is too pessimistic, my estimate of where we must be too optimistic, and my suggestions for getting from one to the other too naive. You may be right in all this and I may be wrong.

Right or wrong, however, I am deeply concerned about the need and the condition of this country and not at all certain that we will make an adequate transition from what is to what must be. In that, I am a pessimist.

On the other hand, it is my deep conviction that of all our educational institutions, the community college is in the best position to make a difference in the direction the American people take at this time. I believe the community college is new enough, young enough, dynamic enough, and flexible enough to adapt itself to the current needs of the American people. In that, I am an optimist.

I believe we have the institution for our time. If we have the will, I believe we can find the way. So--LET'S START OVER-- to be what we are capable of being, to be what we were meant to be--to be what has to be.

THE STUDENT AS CHANGE AGENT

Jane E. Matson, Professor of Education
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There is little doubt that changes are taking place in institutions of higher education across the country today. The nature of the change, its rate, its direction and its ultimate effects on the social institution of post-secondary education in America are not yet clear. But it is quite clear that the major agent precipitating this change is the student. And that is as it should be. For students should be the focus of all change which takes place in any college.

Students may produce sudden, dramatic change--for example, the presence on a campus of a thousand or more National Guardsmen with bared bayonets--as a result of direct confrontation or demands which are "not negotiable," or they can facilitate orderly, purposive change directed toward either the re-definition of the college's goals, or a better means of achieving long-established objectives.

Any doubt about the effectiveness of students in bringing about change is dispelled by almost daily headlines in the newspapers in any section of the country. Unfortunately, only the most severe and truly institution-shaking developments are reported in the press. In a myriad of other situations, reported on only a very limited basis, students have been directly involved in purposive, beneficial change in college goals, curriculum, policies, procedures and general climate without the harsh accompaniment of confrontations, sit-ins and generally disruptive and destructive behaviors.

The community and junior colleges have been less beset with trials and tribulations than senior institutions, but complacency about this would be ill-advised. In the larger urban areas, Chicago and Los Angeles to name only two, the community colleges have been plagued with disruption and even in some cases, complete interruption of the educative process. High schools in these same communities have not been immune. There is no reason to believe that the same contributing forces and factors are not present in junior colleges, even though student activism has not been as prevalent as in senior institutions. But if junior colleges are able to effect orderly change rapidly enough, if the response of the college establishment to the educational needs of its constituents is realistic, it may be possible for most junior colleges to avoid major disruptions.

It is my thesis that the most effective and efficient way to induce change in a college is to make students full partners in the enterprise. Students traditionally have not been seen as agents of change. The perceptions of the forces of change have been largely limited to administrators, the faculty and the community, all working within the framework of the authority of the governing board. While

students have had to bear the ultimate effects--good or bad--of changes which took place, they have seldom been consulted nor has their participation been sought or even permitted. And yet in the few years since the explosive Free Speech Movement at Berkeley, students have been directly or indirectly responsible for bringing about more changes in higher education than had occurred in several previous decades.

Since the ultimate effects of our successes and our failures in meeting educational needs must eventually accrue to the students--and only to them--it seems there is considerable justice in their participation in the process of decision-making which determines the nature of their education and, indeed, even the course and nature of their lives.

What are the major avenues of change and how can the best contributions of students be ensured?

There are five major areas in any college which constitute the means by which the institution's goals and objectives are achieved. The relative emplasis placed on each of these areas and their relationship vary among colleges but all are used to some degree by all colleges. These areas are:

1. The curriculum
2. Instruction
3. Services to members of the college community, i.e., students, faculty, administrators
4. Services to the community-at-large
5. Out-of-class programs

These categories are not mutually exclusive, but any significant change which occurs in a college is likely to be identified with one or more of these areas. With these five areas in mind, how can students be involved?

It is my belief that students have the potential to make valuable contributions in all of these areas. This may be a somewhat radical point of view, but education is sadly in need of radical points of view, all of which, of course, need to be tested in practice. But it seems presumptious for anyone--board members, administrators or faculty--to make the assumption that students are not affected by decisions made in any of these areas. And if they are affected by the decisions, a sound rationale can be established for their participation in the decisions. So I would not exclude students from any area.

I also believe that the college and quite logically the student personnel staff has the responsibility for assisting students to acquire the skills and knowledge which will enable them to participate most effectively in the design and direction of their own educative experience.

The precise formula for the involvement of students which guarantees success by any criterion has not yet evolved--and probably never will.

There are all kinds of problems when participating in the decision-making process is broadened. It would not be surprising if a president is nostalgic about the days when he made all the decisions and his major concern was to keep the governing board reasonably happy with his performance. But that day--if indeed it ever existed except as a figment of imagination--is gone beyond recall. We need to gather information about the wide variety of models for student involvement currently found in junior colleges, and systematically evaluate their degrees of success. While it is likely that a number of models may be rejected as unsuitable, we may learn that in general, the success of a certain model will depend less on its precise design and more on the basic attitudes, values, good will and skill in human relations of all those involved in implementing the system.

Let me close with some observations from which some guidelines might be developed:

1. More significant information is needed by all junior colleges about students. We like to believe that junior colleges are more "student-centered" than other kinds of institutions, and yet it is amazing to consider how many decisions are made with little or no consideration of the ways in which the students might influence the decisions.

2. Better use needs to be made of what is already known about students. It is a well-known truism that all human beings do not learn exactly the same way. And yet we know very little about the relationship between learning styles and significant human characteristics. Consequently, our classroom procedures have a remarkable similarity and show an astounding lack of concern for individual student differences. We need to set up and test hypotheses about relationships between student characteristics and learning styles.

3. We need to believe in students and in our own ability to help them establish and achieve their goals--both short-range and long-term.

4. Student participation must be seen as a necessary and valuable assistance to the college in the governance process and one which will improve the quality of the college in all dimensions. Any suggestion that student involvement is mere tokenism, or a ruse or effort to avoid student activism, is one of the quickest routes to disaster.

5. A key to the ultimate success of any endeavor involving two or more human beings is effective communication. Avenues of communication must be established and maintained.

Any change must be evaluated in terms of what effect it will have on students--therefore, they must be made full partners in the process of change.

E D U C A T I O N F O R W H O M ?

Panel Discussion

Robert E. Lahti (Chairman)
President, William Rainey Harper College, Illinois

Our mission will be to share a few ideas about "Education for Whom?" and then plead for a real dialogue with you about successful ideas developed in various faculty orientations and/or ideas you wish to share with each other as to how you have effected change, or the implementation of ideas within your own disciplines or faculties.

As my small contribution to this conference I'd like to relate to you a few quotes from a pertinent article in a February issue of Saturday Review, entitled "The End of the Great Tradition":

> "When the university and its scholars lost their monopoly as disseminators of news and ideas--as purveyors of information--the halo began to tarnish. What printing and the Bible did to the church, mass media are doing to the university. The Indies? The East? Outer space? See it on television; take a plane; someone's been there. The professor tells the kids about civil liberties, search and seizure, habeas corpus. Hell, they say, that's not the way it was in Selma, at the Pentagon, in Chicago. The cops bust in; the sheriff is in with the KKK; the university has sold out to the Pentagon; the scholarly paper about rural development was financed by the CIA. Africa is going modern, sir. There are skyscrapers in Lagos. What do the professors know that isn't accessible to anyone who can travel, read, turn on the tube? Yes, they can deal endlessly with technical questions, or with remote matters of scholarship, but can they apply their disciplines to say something valid about the human condition? At the same time, are their ethics any higher, more noble than those of anyone else?
>
> "Technical questions yes, but a man who has established his mastery as a molecular biologist is no more qualified to establish a curriculum--that is to tell a student what he should know--than the student himself (except of course, in the field of molecular biology).
>
> "If professors devoted less time to disseminating information, which can be disseminated a lot more efficiently in other ways, they might have more time and energy for discourse and for real questions and research. In many instances, the lecture is a sort of tribal ritual affirming the ancient, vestigial eminence of the doctor."

In my mind, what we have been talking about when discussing change through technology is setting the teacher free--raising the teacher role

to an even higher mark of dignity and distinction, i.e., involving him in a process that will draw on all of his human resources--cultural, intellectual and temperamental.

We've been talking about a greater emphasis on student learning and lesser emphasis on teacher teaching.

We need to heed the cry of some students whose pleadings are so well-framed in the words of a Norwegian writer, Henry Neevland: "Need we all be born as originals and die as copies?"

Show me an institution that is not experimenting with improved educational strategies and I will show you an institution slated for decline. Meaningful education today may be largely synonymous with innovative education.

* * *

E. B. Moore

Asst. Prof. of Higher Education
Auburn University, Alabama

I have never seen or participated in an effective faculty orientation conference. Far too much attention has been given to administrative details and admonitions on "how we do things at this institution" with little or no attention given to the responsibility of the institution to the student. Faculty orientation, if it is to be truly effective, must center about the student and his needs and the strategies and structure necessary to effectively meet those needs.

Students are appealing to educational institutions to use what is known about them, their needs, and their aspirations in designing educational experiences to fill those needs. The faculty orientation program should seek to relate to the faculty the philosophy, goals, and purposes of its particular college; the characteristics of the college's peculiar student body; and to refresh the minds of the faculty in those areas which they should already be knowledgeable.

Too long have faculty and colleges mouthed their commitment to student and community. They must now put their action where their mouths are.

* * *

Shirley Wurz
Dean of Students, Alfred A & T College (New York)

I'd like to share with you something that has happened at Alfred College this past year that I think is particularly exciting.

About a year and a half ago, we realized that we didn't have good channels of communication, and we didn't have good channels for students to get things done at our particular college. If they wanted to find something out or get something done, they had to go to this committee or that particular committee, and they had the whole run-around. They soon got tired of this.

For a year and a half now, the students have been working out a proposal and it has been accepted by the faculty, by the administration and by the student body and it will be in effect next year. It's a new form of student government and I think a very impressive form because it embodies a community and this in very brief essence is the structure of the thing:

There will be five administrative members. One will be the Dean of Students by virtue of his position and there will be two administrators elected by the students from the student personnel division and two administrators from the general administration elected by the administration; there will be five faculty members--four of these to be elected by the teaching faculty and the other to be elected by the student body; there will be five student members elected by the student body.

This is not just a sounding board; this is a policy-making, policy-regularing group for the entire college for every area outside of the academic area....

Written into the structure is the fact that any student can bring any question concerning academic policy to this particular group and have it referred to someone for an answer.

Now I should think that this type of action should break down the idea that you can't have a community of people working together. I think it will work. I think it has great possibilities because it means that students can get things done without going to 50 or 60 different people.

* * *

Open Discussion

Question: What are the ingredients of a good faculty orientation?

Jane Matson, panelist

First of all there should be an explanation of the type of students that exist on that particular campus. I think also that any new faculty members coming to a junior college for the first time should be given facts on that particular junior college and perhaps a brochure to read.

E. B. Moore, panelist

I'll support that. I don't think we pay enough attention to students because they're only incidental, but beyond that we ought to look at the thing that we are going to do for students while they're there. We end up too often doing things to students and not for them. If we don't understand them and their needs, how can we do things for them and with them? If we don't understand the community and its needs, how can we serve it?

Jane Matson

I would just like to say that I completely agree that faculty orientation should deal with the nature of the student and the nature of the institution....Presidents or deans or whoever does the hiring at the institutions could have this information available for applicants for jobs, because I think many times people are hired in situations which are inappropriate for them and this is almost a disaster.

Robert Lahti, chairman

A couple of comments. Very often faculty orientation is the last ditch effort by the president or the dean of instruction. I think this almost dooms the program to failure....if they do that without the faculty who are being oriented, then faculty members are almost turned off before you get started. I think that faculty involvement, getting them to accept full responsibility for faculty orientation, is almost Utopia. I would think that this is where your faculty orientation might be better--getting them to accept the responsibility for organizing plans for the orientation of their own peers.

Jane Matson

I'd just like to ask a question. How many of you have had any experience with the kind of faculty orientation, where students

were asked to come and talk about their perception of the college? It can be a very interesting experience, and it seems to me that a lot of the buildup of anxiety on the part of new faculty personnel, which is pretty high by the first day of class, can be alleviated in this manner as the new member gets an idea of the way that students feel and what they expect from him and the rest of the faculty.

Robert Laht.

We tried that in another institution other than the one in which I presently serve. Bringing back some of your alumni students to involve them in the orientation is another technique we found extremely successful. They had some good feedback because they had something to contrast and I have heard that other colleges have done this very successfully.

NEW COMMUNICATIONS POTENTIALS FOR JUNIOR COLLEGES

Frank W. Norwood, Executive Secretary
Joint Council on Educational Telecommunications

The demand upon us today is not merely that we keep pace with a rapidly changing society, but rather that we make - in what may be the last lap of the race - an all-out effort to come right now from the rear of the pack to that position of social leadership which we, ourselves, have been insisting is our rightful place. To do that, new ideas, new technologies, new institutions are going to have to be employed. The very existence of the Junior College is testimony to the fact that "the dogmas of the quiet past are inadequate to the stormy present."

One hundred years ago, a vast land was knit into a single nation, but not merely by building more wagons and extending our dirt roads. It seems obvious that we, too, are going to have to apply present tense technology to present problems. One hundred years ago, however, we could not build railroads without making plans for rights-of-way. The family auto and the diesel truck required the paved highway. The airplane made necessary airports and navigational systems. If we are to make use of radio, television, computer-assisted instruction, information retrieval and the other forms of electronic communication, we had best keep our eye upon our need for "electronic highways." This is the point of focus of the Joint Council on Educational Telecommunications.

The JCET is a consortium of fourteen national educational organizations, including the American Association of Junior Colleges. Its role is to keep the educational community informed about communications developments, including both developing technology and emerging public policy; to provide a forum at which the Dean, the educational broadcaster, and the "computernik" can discuss their common problems and mutual goals; and to speak for education's legitimate needs to the technologists and the policy makers.

When it was formed, in 1950, as the Joint Committee on Educational Television, the JCET led the fight for the reservation of television channels for non-commercial television. In electronic communications, as elsewhere, options must be seized when they are available, because when they are lost, they are lost forever. In the 1920's and early '30's, there were some 300 educational radio stations in the standard (AM) band, but education did not press strongly enough for educational reservations in AM broadcasting, and today there are only a handful of such stations.

That acting forcefully at the proper time has paid dividends is demonstrated by the present level of educational television....The junior colleges have a proud record in educational television, including such stations as KVCR-TV, San Bernardino Valley College, KCSM-TV at the College of San Mateo, and WVUT, here at Vincennes University. And no application of television to our educational needs has drawn wider praise than the Chicago College of the Air.

The present JCET is as committed to public broadcasting as it was twenty years ago. It is also committed to the proposition that education must keep an eye upon the future, and protect its interests. Two of our present major thrusts are in cable communications (cable TV) and in communications satellites - both domestic and international. These are the electronic highways which today offer new communications potential for junior colleges.

If there is a junior college campus on which it would be more appropriate to speak about cable communications than Vincennes, I am not aware of it. CATV - community antenna television - has been an exploding industry during the past half-dozen years. President Beckes and Vincennes University have not only been aware of cable television; the college owns the local CATV system here and in Washington, Indiana.

And why should the rest of us concern ourselves with CATV? If there is a representative in the audience from Clatsop Junior College, in Astoria, Oregon, I'm sure he can help to answer that question. CATV systems began as devices for receiving off-the-air television signals at an optimal location, and delivering them to subscribers via coaxial cable. Few CATV systems fill all the available channels with off-air programming. Many are now beginning to offer additional programming over the systems' unused channels. In Astoria, Clatsop's own closed circuit television facilities are extended to the entire community over the local CATV system.

Cable communications holds additional promises in both the near-term and long range future. While some CATV systems deliver 12 channels to all subscribers, it is technically possible to add still more channels by means of special convertors, and to deliver those channels only to previously selected reception points. In-service education for teachers, medical programs for doctors, middle management programs for local business and industry are all possible right now on cable TV. The junior college, with its strong commitment to meeting a wide range of local needs should, I suggest, be more than casually interested....

The Joint Council on Educational Telecommunications has, in your behalf, put before the FCC and the Congress the case for educational reservations in cable communications, as in 1952, reservations were provided in conventional television. Based upon the historical precedents of 1952, and of FM reservations in the late 1940's, we have asked that each cable system be required to make available 20% of its system capacity, on a non-profit basis, for educational and other noncommercial services.

To aid educators interested in making use of CATV, we have prepared an informal memo - to be expanded and published later - entitled "Some Notes on Negotiating for Educational Channels on CATV." Since you are all members of one of the Joint Council's constituent members, we should be happy to provide each of you with any help which we can.

The second arena in which we are active in your behalf is satellite communications....Distribution satellites would be large enough to send signals which could be received at many points at relatively low cost. NASA and the government of India plan satellite transmission of instructional television to hundreds of village schools and community centers in 1972. Television receivers would be modified to pick up the satellite transmissions at an approximate cost of $150 each. It seems clear that it is not too soon for American education to begin to think, to plan, and to act, in the matter of communications satellites....

The full potential for educational uses of satellites includes not only public broadcasting, but instructional radio and television, facsimile transmission, electronic blackboards, and data communications. The same facilities which provide television communication during viewing hours can, between midnight and dawn, be used to link computers.

The new communications potentials for junior colleges then - and for all of education - include cable communications which can link the campus and the community, and the communications satellite, which can link two or more campuses, wherever in the United States they may be. If such technologies as television and computer-assisted instruction are to be used on a cost-effective basis in education, it will not be by building a CBS Television City and an IBM on every campus. We shall have to share our resources. Since that is so, we had best keep our eye upon our communications options, our free access to those "electronic highways." If we do not, when we are fully ready to move television programs and computerized information, we may find - too late - that "you can't get there from here."

A TOOL FOR CHANGE: CGP

Richard D. Rooney
College Entrance Examination Board

As you talk and think during this conference about strategies for change--specifically, how can faculty reach the wide range of community/junior college students more effectively-- I would like you to consider a new tool available to junior college students, faculty and administrators, the Comparative Guidance and Placement Program (CGP). I would like to describe the background and goals of the program and suggest some ways CGP might help institutions participating in PWDI.

CGP has been developed during the last two and a half years with the help of more than 65,000 junior college students and several hundred faculty and administrators at 114 junior colleges across the country. Recognizing the lack of an adequate battery of tests and services to serve the guidance and placement needs of students in two year colleges-- especially students interested in occupational programs or those needing developmental study in basic skills such as English and mathematics-- the College Board and Educational Testing Service designed this program specifically for students in junior colleges. CGP seeks to help a student learn about himself--his interests, his abilities, his attitudes and aspirations-- and make educational and vocational decisions that are realistic in terms of these interests and abilities. Introducing some measures of special abilities not previously included in college admission tests-- like short term memory, non-verbal inductive reasoning, and the ability to follow directions -- CGP seeks to provide positive indicators of potential success for students with non-traditional abilities and interests. (It is appropriate that CGP include measures different from college admissions tests for it is <u>not</u> an admission test, it is to be used after admission has been granted.) Also by providing placement tests specially designed to identify students who need developmental study in reading, writing and mathematics, the program facilitates proper placement in crucial skills courses.

CGP services focus on the individual student, but at the same time the program seeks to help faculty and administrators guide and place students in curriculums and courses appropriate to their abilities, identify students who would benefit from developmental courses, reach students who may want special assistance-- such as help with reading speed and comprehension, help with study techniques, financial aid, personal or vocational counseling, and plan curriculums that will meet the needs of both students and community.

To relate CGP to PWDI, I have reviewed the list of possible topics for regional, subregional or campus workshops suggested by the AAJC

advisory committee and staff and noted how PWDI and CGP might work together. First, with orientation for faculty members. Descriptions of students' interests, abilities, and aspirations, both by curriculum and for the institution as a whole, will be useful. Reference to national and regional normative data from the program can provide the basis for comparative analyses with students and institutions elsewhere. Most importantly, the wide variety of abilities measured by CGP and the program's emphasis on identifying students for developmental programs will provide a broader description of the student body-- and parts of it-- than other available testing programs. Faculty must understand how diverse their students are if the wide range of students is to be reached effectively.

A second topic in PWDI is developmental programs. I have already mentioned the broad description of reading, writing, and mathematics abilities provided through CGP. The validity and placement analyses in CGP will also help faculty decisions about which students should enter what courses. (The report from the program given to each student will include, after sufficient time to accumulate historical data, predictive statements about a student's probable success in beginning courses in English and mathematics. In addition we report scores for <u>groups</u> of students on parts of the placement tests. For example, scores for students will be produced for three kinds of questions contained in the reading test--understanding the main idea of a passage, understanding the secondary idea, and understanding the intended inference. Teachers of reading can then structure their courses to meet their students' particular needs. Similar subscores for groups of students will help writing and mathematics teachers.)

A third PWDI topic is evaluation instruments to improve teaching. Here, I am reminded of the college where a CGP validity analysis showed a spelling test to be the best predictor of performance in an auto body mechanics major. Although validity analyses don't often produce results as startling as that, a close look at the relationship between grades and predictors--high school grades and test scores--can provide teachers an analysis of the students' and the teacher's performance in relation to indicated abilities. There are also satisfaction questionnaires which ask students questions about their satisfaction with the level and the degree to which their educational and career goals are being satisfied. These--and more--are summarized for groups of students to give teachers feed back about what they are doing for their students. We are doing some research on satisfaction and persistence so that we can change from our present reliance on grades as a criterion to more significant concerns such as student satisfaction. It is too early in the research to report any results but we have high hopes. You'll get reports, particularly if we get positive results.

For institutions working with faculty advisement of students, another PWDI topic, the CGP Student Report offers great assistance, Rather than simply presenting test scores, the Report focuses on how the test information relates to probable performance in different curriculums. Using the interest information reported on the same paper, a student can review his stated goals, interests and potentials to engage in a counseling dialogue with his advisor. CGP could help give such a discussion something specific to <u>start</u> with.

To help with another PWDI topic, student life in relation to classroom and campus, the program gives several kinds of information--about student abilities, special needs such as counseling, interest in extracurricular activities and family background--which can help integrate the academic and personal lives of a student. Also the information about the student background and goals might assist with planning campus programs that bring the often separate classroom and campus lives of a student closer together.

I have talked about the interest measures, the ability measures--both placement and special abilites--and the biographical questionnaire from CGP and how these instruments and the services that go along with them might help serve students, faculty and administrators in PWDI colleges. Essentially, the program provides a description of students, both as individuals and in groups and enables college teachers and counselors to get a focus on some of the problems they encounter. For the students this is a self reflection, for the institution it is a source of input for a basic institutional research program. As PWDI institutions seek to change, it will be helpful to them to have the descriptive information provided from CGP as a starting point for making changes and as a backdrop against which to make comparisons in subsequent years.

This talk begins to sound like CGP can do everything, including wash the dirty dishes! At times my friends accuse me of thinking it can do even that, but to be realistic, we must emphasize that CGP does not provide all the answers to questions raised by students, faculty and administrators. But the program does organize and report data so that people can approach some of their problems with information that will help them make better decisions. Used as a <u>starting</u> point in making decisions, CGP can be very helpful; used as the answer to all problems, the program might be a disaster!

One other disclaimer. I have talked about CGP without suggesting you could do some of these things yourselves. You could give students a checklist to indicate the kinds of help they need; you could ask students about their satisfaction with their courses and career plans. You could use interest, background and ability measures like the Strong or Kuder, the Co-op series, GATB, or DAT. Of course, CGP puts these separate parts into one comprehensive program for you.

I have tried to cover a great deal in a short time. We have regional offices spread across the country with staff members and CGP consultants available to consult at PWDI regional workshops.

Finally, a request for your continued help. CGP, from the time before it had a name, has benefitted from the advice of faculty and staff in community junior colleges. The College Board, as a non-profit membership organization, relies on people in education to keep it on the beam. Good advice from many of you and your colleagues has started us successfully on the Comparative Guidance and Placement Program. But CGP is growing and changing so we eagerly solicit your partnership in the continued development of the program.

GENERAL EDUCATION AND TECHNICAL EDUCATION

Dinner Address

Joseph Seidlin, Teaching Consultant
Alfred A & T College, New York

Professional schools and vocational and technical schools alike in their early history had to prove themselves superior to apprenticeship as preparation for a profession or a vocation. Today the older or better established professions or technical vocations are dominated by their respective schools. The younger or budding professions or vocations still meet with antagonisms and prejudices of the practitioners who arrived the hard way, i. e., without benefit of formal professional or technical training.

In the curricular development of professional schools we find general, but not too general, prerequisites: in medical schools - biology, chemistry, some physics; in engineering schools - mathematics, the physical sciences; in law schools - history, political science, economics.

The early vocational and technical schools were dominantly, if not exclusively, vocational and technical. This was the avowed intention and objective. In fact, the chief selling point of vocational and technical schools was that their curricula were not cluttered up by the so-called liberal arts courses.

And that brings us to the colleges of liberal arts. Slowly, almost imperceptibly, these lofty citadels of cultural and liberal education were being contaminated by a kind of specialism and professionalism. Nobody was really being fooled by the prefix "pre" (pre-professional). The age of specialization had arrived. Discoveries, inventions, and gadgets multiplied. Progress was in flower, standards of living soared, utopia was just around the corner. Everything was improving at an unprecedented rate except, perhaps, people. Somehow, in the age of specialization, we overlooked them. And so we begin to hear of the evils of overspecialization, viz. some nasty wisecracks, such as "specialists are getting to know more and more about less and less and pretty soon they get to know everything about nothing." What's to be done about the rapidly increasing number of much-schooled people, who, except for their professional, vocational, or pre-professional knowledge and skills, seem illiterate, inarticulate, and ethically and aesthetically stunted?

For thirty years or more we disparaged and condemned cultural and liberal education. For a time cultural and liberal were words of opprobrium. So we disinterred GENERAL EDUCATION. In colleges we witnessed a rash of survey courses. At lower levels we manipulated content of one or more well-delineated subjects and developed for general consumption such courses as general mathematics, general science and a host of correlated and integrated subject matter.

Articles in professional and even some lay journals, dissertations, books, speeches, symposia, workshops, a variety of courses in Schools of Education, and even a specialized Journal of General Education, invaded in force the writing, speaking, and thinking of the school world. Professional and non-professional educators vied with each other in countless attempts to define (1) general education content, (2) general education method.

It may be that there <u>is</u> no general education content. That may account for the many varied and conflicting definitions of general education content. Conceivably, not so much the content as the methods, attitudes, and, most of all, a carefully defined set of objectives, may lead to general education outcomes.

Conceivably, <u>general</u> education may be as rigorous and demanding (in abilities, prolonged and sustained effort, and consummate interest) as <u>special</u> education. It may be that in general as in special education we shall need to be extra mindful of individual differences. Perhaps, also, all the factors conducive to learning as well as the laws of learning are present and equally operative in both special and general education. Most of us are fairly well agreed that in preparation for a profession or a vocation, formal education (schooling) plays a dominant part. So far as I know no reasonable person would deny that we learn and keep on learning on the job. Is it unreasonable to suspect that, mutatis mutandis, all this is applicable to general education? Briefly, the better and firmer the foundation for general education, the more certain we can be of a follow-up superstructure built on the job, in this instance, on the total job of living. Is it less important or less desirable to "keep alive" in the total job of living than "on the job?"

Because of a rapidly developing philosophy of education, we first indicted some practices and then proceeded to destroy, to eliminate from use, the very words which described these practices. One such word is <u>training</u>.

About 10 years ago I attended a meeting sponsored by the American Council on Education. At one session four papers were read on the "Education of Teachers." In a sort of preamble to the papers the presiding officer told us that the original titles of the four papers all had the word "training" in them and how happy he was that just before the programs went to the printers, the four speakers corrected the titles by replacing the word "training" by "education." Then the speakers, each in turn, proceeded to talk on the TRAINING of teachers.

That disturbed a lot of people. I was not disturbed, though I was a bit annoyed with the fact that so many were disturbed. In the discussion that followed, I inquired, even as I am raising the question now, "What is wrong with training for a job?" Really, now, is not the training for a job the undeniable responsibility of vocational, technical and professional schools? As schoolmen we are becoming - and rightly so - more and more concerned about other responsibilities of our schools,

as evidenced by the theme of this conference. Willfully or unwittingly we created a conflict between these responsibilities. Actually, there is no conflict. But what a superabundance of confusion.

The California smog is transparent compared to the intellectual and emotional fog that every now and then envelops schools and schoolmen. We'll come out of it all right. We are coming out of it. There is no conflict between training for a job and training for the job of living. Both are aspects of "education"; both are the inescapable responsibility of the schools.

Stripped of all rationalization and pretense, our problem is not how to make one kind of education contribute to another but, rather, how to make schools - all schools - contribute to education - to the education of a free people in a democracy. It matters little on what rung of the educational ladder a school stands (kindergarten to post-doctoral) and whatever its special or peculiar function or obligation: socialization, the 3 R's, animal husbandry, the broad field of electronics, pharmacy, medicine, etc.--its general function, its overall obligation, is that of any or all educational institutions.

SUMMARY OF DISCUSSION GROUP SESSIONS

Participants at the Vincennes Conference met informally in small discussion groups involving both college personnel and consultants to discuss ways of improving instruction, and how students are "turned on," and to evaluate the conference. Such informal discussion was judged by many of the conference participants to have been one of the more valuable aspects of the conference. A report of the top ideas coming out of the discussion groups was made at a final evaluation session in the University Tent Theater. Those ideas considered to be of greatest importance by the conferees are as follows:

1. The use of interaction analysis, role playing workshops and controlled sensitivity training in the improvement of self-understanding, for both improved instruction and personal development;

2. The use of tapes as a means of assisting in evaluation, to be used by both instructor and student;

3. The expanded use of students as tutors, counselors and visual-aid assistants;

4. The need for faculty members to attend institutes and workshops to see demonstrations of the effective use of visual aids;

5. Limiting of class size for developmental courses;

6. Provision of released time for innovative practices;

7. Continual reappraisal and revision of instructional methods;

8. Interdepartmental cooperation in formation of developmental studies programs;

9. Compensatory programs for socially and academically disadvantaged;

10. Peer group interaction is essential in the "turning-on" process;

11. Student participation in all phases of college life;

12. A "turned-on" faculty to produce "turned-on" students; and

13. Change should be regarded as a function of student needs.

A TIME FOR CHANGE

Albert A. Canfield
Director, Washington State Community College Board

Two weeks ago we had a two-day conference in Olympia, Washington. We involved representatives of the state trustees association, state presidents association, state faculty association, and the state student association. We sat down to discuss our problems and what to do about them. As a consequence of this discussion, it became obvious that the judicial role of administration, so characteristic of the past, is no longer appropriate. We must find a way of consolidating energies and interests and refrain from the great tendency to act as an executive or a judicial body. This may be what students are saying. They are trying to tell us many things. They are so beautiful. In my brief moments with you today I hope I can relay what's in my heart as well as what's on my mind.

It's been an interesting three days. Forgive me for noting some things I feel were significant. The keynoter, a long-time personal friend, urged that we base evaluation on what the student learns. Then, when asked for evidence on whether or not the students do learn more, said that he wasn't interested in research. What he meant was that he's interested in finding if things <u>are</u> going better, rather than <u>might</u> they, or could they? He also emphasized the need for massive Federal support, while this morning I heard some voices crying out that we've got to do this for ourselves. Another speaker appeared to convince some of you that you can evaluate instruction by watching the instructor "do his thing," and if he's a sincere teacher he'll let you talk to him about it. I'm reminded of the emphasis on team teaching which I consider to be an extremely modest innovation at best. Instead of having one person talk, people take turns. Instead of having one teacher in a group of students, you put two of them in the same room with a group of students--perhaps for mutual protection? I'm not a great deal more impressed with taking pictures of teachers "doing their thing" and then reviewing them. Somehow or another it reminds me of the days when people felt that individuals died because the witch doctor did a bad dance or the evil spirits would not be overcome. There's a great tendency for many of us to feel that if we just work harder at the old way things will improve.

I hear it said that smaller classes are the solution. There's no evidence to indicate that any one class size accomplishes any less or more than any other.

I keep hearing that people want to improve the lecture. There's no evidence that a bad lecture produces less learning. A recent book, <u>The Teaching-Learning Paradox</u> by Dubin & Tareggia, makes these things clear.

We had an address Tuesday by an author of two books that are descriptive treatises on innovation, and he urged us to do some evaluation. Later that day in one of the groups, a conferee, as a matter of fact he was a consultant from Alabama, said, "How do you evaluate instruction?" There was no response.

During lunch I sat across the table from two charming young ladies who commented that their institution couldn't afford one opaque projector or one single concept film loop projector. I sat there realizing that about 50 of you were going to watch a demonstration of computer-assisted instruction that same day. What an economic and technologic gap.

Later in the afternoon as I was going back to the dorm, a faculty member here at Vincennes said to another man, "What are you going to do in class today?" The person answered, "I haven't the faintest idea."

As of last night I felt uneasy and confused; then some warm, concerned people put some hope back in me. It takes so little.

I have just read an incredibly provocative booklet called "The Children of Change," produced by Kaiser Aluminum. When I read things of this calibre and intensity it rouses my passions to help achieve something meaningful. But I honestly believe, as I tried to say yesterday, if you don't have something specific in mind the passion only produces pain. As a young man said this morning, "What are our objectives; what is it we're trying to do?" Good questions! Like it says in the Talmud, "If you don't know where you are going, any road will get you there."

In the informal sessions I heard many comments about the fact that teachers aren't taught to teach and I think that may be correct. We had a group of college professors here but I didn't hear a single comment from them on this issue. Let's assume for a moment that our people really don't know how to teach very well; but let me ask you, what do we know about teaching? Your silence just about sums it up.

On the other hand, what do we know about learning? We know a great deal about learning. We have a hundred years of research on college sophomores and rats to back up some things that seem to be pretty well documented. I was told at this meeting that Jerome Bruner had just reviewed all of the literature on learning, and found that it said essentially the same things it did twenty years ago but in a somewhat different way. And, what I think it says is: People don't learn unless they want to, people don't learn unless they're actually involved, and people don't learn without reinforcement or feedback. Motivation, participation, and reinforcement.

Bill McKeachie has written a chapter in Gage's Handbook of Research on Teaching which contains this statement, "Thus, the simple principle that knowledge of results facilitates learning is one of the few

generalizations clearly supported by research on college teaching." In re-reading that chapter, it's the only generalization in McKeachie's chapter. We've known, since Ebinghaus' time, that if you don't know what to learn, it's difficult. This has been reconfirmed hundreds of times in master's theses and doctoral dissertations. I don't see why we don't just accept it and get on with using teaching methods that implement it.

I'm somewhat reluctant to be critical of education because I'm part of it; but I'm a lot more willing to be critical of it being in it than I would be, frankly, if I weren't. It's time we tried some different approaches. My belief is that there are better approaches than lectures and group prescriptions and it need not depend on Federal funds either.

I believe the Federal program structure could use a substantial major overhaul, but innovation and improvements always have been, and I contend always will be, an individual thing. It takes an Albert Schweitzer type, and I know one, to make basic changes in educational practice. If you don't know Dr. Samuel N. Postlethwaite you may not know one. Sam Postlethwaite, without doubt is the most humane, the most creative, the most enlightened, the most devoted, the most sincere gentleman I know in education. And, Samuel N. Postlethwaite, at night and on weekends, evolved the audio-tutorial approach to instruction which has done more to reshape educational practice in this country than any other recent instructional innovation. And, he did it without one dime of support from the Federal Government.

I keep saying that education should emulate medicine. Medicine has the key to effective performance. Medical people diagnose, prescribe and evaluate. They know a great deal about how to assess and identify diseases because they know what health is. And, when they turn to prescribe, they have a little black bag full of various prescriptions and what they select depends both on the disease and on the patient. They know, for example, that penicilin isn't just exactly the right thing for some folks. They apply that, incidentally, not on the national scale, not on an institutional scale, not on a course scale, but on an individual scale. In medicine, assessment is based on what happens to the patient, not on how much the physician has written or how he acts on hospital committees. If the patient dies, the physician decries the state of medicine rather than complaining about the dumb, unmotivated patient and putting an "F" on his obituary.

I have another friend who is a marriage counselor. He tells me that his practice has gone very badly lately since he started his new approach. When his clients come in, he listens to both sides of the story; he gives the wife an "F" and the husband a "C" and turns them loose.

When the lawyer says, "I went to law school, I passed the Bar, but all my clients lose in court, the criminality of my clients is the problem."

Or, when the engineer says, "I graduated from engineering school, I'm a licensed engineer, but all my bridges fall down because of the crummy materials put in them." Or, when the medical doctors blame the people for dying, we'll have justification for failing students rather than the instruction.

I recently had a very pleasant visit with an assistant dean of medicine at the University of Washington. He feels that the two primary causes for the improvement of education in medicine were, in order: First, the practice of burying the physician with the Pharoah. (I find that very motivating.) And second, the occurrence of malpractice suits. I think it would be interesting if a parent would march to an attorney and say, "I would like to sue this institution and/or this professor for giving my child an "F," because the teacher and the institution did not use all of what's known about getting a person to learn." In passing, neither the practice of burying of the physician with the Pharoah or the malpractice suit was related to massive Federal Government spending.

There's a lot of evidence that a lot of people are getting concerned about educational practice. George Leonard's book Education and Ecstasy is an exciting excursion into education. A book, I Posed as a Teenager, is an illuminating commentary on some of the things that are going on in our public schools.

Peter Drucker just wrote an exciting book, in my opinion the best he has done, The Age of Discontinuity; one of the chapters is an indictment of educational practice.

And, of course, I think if you don't read "The Children of Change," an incredibly exciting booklet by Kaiser Aluminum, which is free, you're really missing something.

We don't need any more student riots and rebellions. There are 500 openings for college leaders in this country. The time for change is now. I think it's time to find a way for students and faculty to take a part in the institution, rather than taking the institution apart. Now is the time for change. We can no longer afford, in my opinion, to engage in clever, polite, cute aspersion and non-confronting condemnations of those we don't approve. Now is the time and now is the era for a commitment to professional accountability in an old and still revered occupation. It's not too early to assess innovation, it's too late to justify our current tradition or practices.

I close with a story that means a great deal to me. At 5:13 a.m. on the 18th of April 1906, a cow was standing somewhere between an open shed and the main barn on the old Shafter Ranch in California minding her own business. Suddenly the earth shook, the skies trembled and when it was all over there was nothing showing of the cow but a bit of her tail sticking out of the ground. For the student of change, the Shafter cow is a symbol of our time. She stood quietly enough, thinking such gentle thoughts as cows are likely to have, while huge forces beyond her

understanding built up all around her. Within a minute a great movement changed the face of the earth, destroyed a city, and swallowed her up.

After two and a half days I say to you, if we don't come to understand the great forces that change our world, we may, some early morning, find ourselves like Shafter's cow, swallowed up by massive upheavals in educational practice.

Now, that story like much of this conference, is just talk, talk, talk, talk. I'd like to be able to keep before me the convictions of that Great Teacher who said, "By their deeds, ye shall know them."

There is so much to do, there is so little time. Oh, how I pray we may show our great affection for people, our great compassion for their problems, and a great dedication to win in our struggle to truly teach.